

MACDONALD COLLEGE JOURNAL



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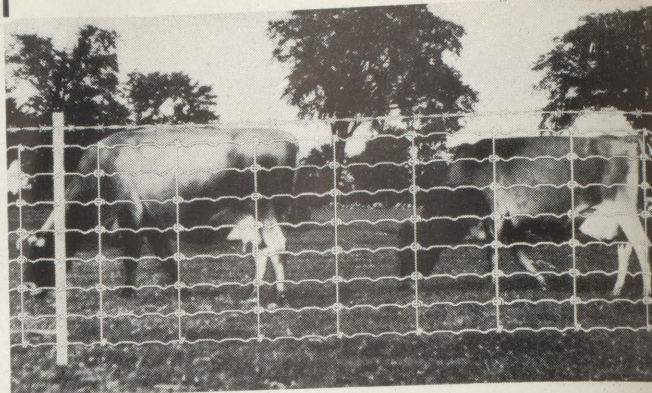
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THE POST-WAR DILEMMA

Before the war the United States was Canada's best customer with the United Kingdom a fairly close second. There was a marked difference in the type of goods exported to the two countries. To the United States we sent newsprint, other forest products and minerals. Our surplus farm products, outside of beef cattle, went chiefly to Britain.

Before the war both these countries had good supplies of Canadian dollars as, in addition to our imports of goods, both had investments in Canada. The United States has retained, and is still increasing, its Canadian investments. On the other hand, Britain has liquidated Canadian investments. Present payment for surplus food exports to Britain are financed largely through mutual aid. By no stretch of the imagination may this procedure be called *trade*. It may be certain that this type of procedure will taper off promptly in the post-war period.

The old practice was to send surplus farm products to Britain and purchase requirements from the United States letting the United Kingdom and the United States square accounts as best they could. This practice was becoming more and more difficult in the pre-war years. It is going to be harder still, if not impossible, in the post-war period.

Surplus farm products cannot be sent to the United States in any great volume. Britain is the logical market. Before the war Britain was the chief market for Canada's surplus of wheat, bacon and cheese. How will Britain exchange goods for Canadian wheat, bacon and cheese in the post-war years? Obviously, Britain cannot send us products that farmers can buy in any great quantity. What may be taken in exchange? It has always been hard to establish two-way traffic between Britain and Canada. Coal and textiles are leading exports of Britain. If Canada will not accept these articles in ex-

change for farm products, some other countries may. One of Canada's competitors in supplying the British food market comes quickly to mind. This is Argentina where, for lack of British coal, corn and wheat have been recently used as fuel. Britain will, of necessity, try to deal with those countries that will take goods in exchange in the post-war period. Thus the dilemma of the post-war years becomes not only a problem in which the industry of farming is vitally interested, but at the same time, one in which the whole nation is concerned.

Surplus farm products sent to Britain cannot be exchanged for farm products that Canada cannot produce. They must be exchanged for goods that Britain may supply. Hence the supplies of farm products to Britain will surely be limited by the amount of British goods imported.

The Atlantic Charter

The best bet for the future is a greater freedom of world trade. If this develops then there is a chance that some of the products that Canada must, of necessity, import may balance accounts with Britain. What we mean is that rubber, rice, sugar, tea and bananas may be secured from countries that in the post-war period may be—if not British—at least under British care. This, in addition to the coal and cloth that may be imported directly, may make it possible to square accounts, especially if and when access to raw materials is equally free to all nations of the world.

Our Cover Picture

The orchard scene on this month's cover was taken at Abbotsford, P.Q. in one of that district's famous apple orchards. Photo by Ed. Fisk.

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The Dominion-Provincial Production Conference

by The Editor

Conferences between the Federal and Provincial Departments of Agriculture to plan production for the ensuing year have become features which make possible a close integration of Canada's farm production. But these conferences have another important value, and that is the opportunity they provide for representatives of all the provinces to meet one another and by personal contact become more fully aware of the agricultural picture for Canada as a whole, and to arrive at a better understanding of the problems which each Department has to face in its own province.

At previous conferences the emphasis was on greater and greater production; this year, in the main, it was proposed to try to maintain production of the various farm crops at approximately the 1944 levels.

Meat

Although Minister of Agriculture Gardiner's statement at the opening of the conference, that the bacon, ham and beef contracts with Britain have been extended to the end of 1946 means that farmers will have an assured market for all these products they can produce, some concern was voiced in later stages of the conference about the hog situation. For various reasons, representatives of the three mid-west provinces felt that their hog production would decline considerably from last year's peak. With a good market for wheat, western farmers, equipped for and experienced in growing this crop prefer it to hog raising. Another reason given for a probable decline was the difficult labour situation. Practically all representatives mentioned the rather unfortunate wording of the announcement of last year's contract for a minimum of 450,000,000 pounds of pork products. Although the intention was to make it clear that this was only a *minimum* figure and that there would be a market for all that could be shipped, the impression the announcement left in the minds of many farmers was that Britain's need was not so urgent as formerly and that the patriotic motive for maintaining high production was no longer present. Notwithstanding this, however, hog production in 1944 exceeded the most optimistic estimates.

Further expansion in beef production was not recommended. It was pointed out that on the basis of present figures, slaughterings in 1945 can be expected to yield about 20 millions pounds more than in 1944, which will be ample to supply all demands. Some increase in veal marketing is looked for, since fewer calves will likely be held for breeding.

Dairy Products

Estimates of cheese requirements for 1945 are the same as for 1944; butter is up 5%. This, together with an expected increased consumption of fluid milk will require

an increased total milk production in Canada of about 500 million pounds. Speaking on this subject, Dr. Barton pointed out that milk products rank high on any nutrition programme and any contribution to Europe that we can make in this regard will be welcomed. He predicted a great expansion in the use of milk in various forms, and urged all concerned to do everything possible to hold production of milk up to the highest possible level.

Poultry Products

Cold water was thrown on any idea of increased production of poultry products. This industry has expanded enormously during the war years and it was felt that the peak has been reached. Future emphasis should be on quality. Fifty percent of our production now grades "A" — this should be at least 80%.

Grain and Forage Crops

Wheat production is likely to be up in spite of the fact that decreases are recommended. It was pointed out in the discussion that in Europe, the first crops it will be possible to produce once the land is back in cultivation will be grain, and Canada should not stress grain production to the exclusion of other products which will be in greater demand. Slight increases in oats and barley and a decrease in rye were suggested, and it was proposed to keep mixed grain at the same level as 1944.

The question of flax was held over pending some action regarding price. It appeared abundantly evident that the considerable increase recommended would not be obtained without a substantial increase in the price for flaxseed. Prospects were that about 1.3 million acres of this crop would be planted in 1945, whereas 3 million acres would be a more desirable total. With higher prices, however, it was anticipated that a substantial portion of this objective could be reached.

Fruits and Vegetables

Probable apple production is estimated at about 85% of last year, with most of the reduction being in British Columbia. Increased production is expected in Quebec, the only province expecting to harvest more than in 1944. A 31% larger strawberry crop and a 15% larger raspberry crop are expected, with substantial gains predicted from all provinces. This is largely accounted for by the fact that partial crop failures in 1944 drastically reduced normal production.

It was recommended that acreages devoted to vegetables for canning should remain at approximately the 1944 levels in the case of beans and corn and be slightly reduced for peas and tomatoes. It is likely that dehydration of vegetables of the 1945 crop will be considerably less than in 1944 which would suggest reduced plantings of cabbage, carrots

(Continued on page 12)

Stops the Run on Nature's Bank★ ★ ★

★ Furrows like these a century ago were used to protect pioneer farms from prairie fires. Today they protect farms from permanent destruction by water. They protect not only the livelihood of a single farmer but the prosperity of whole communities.

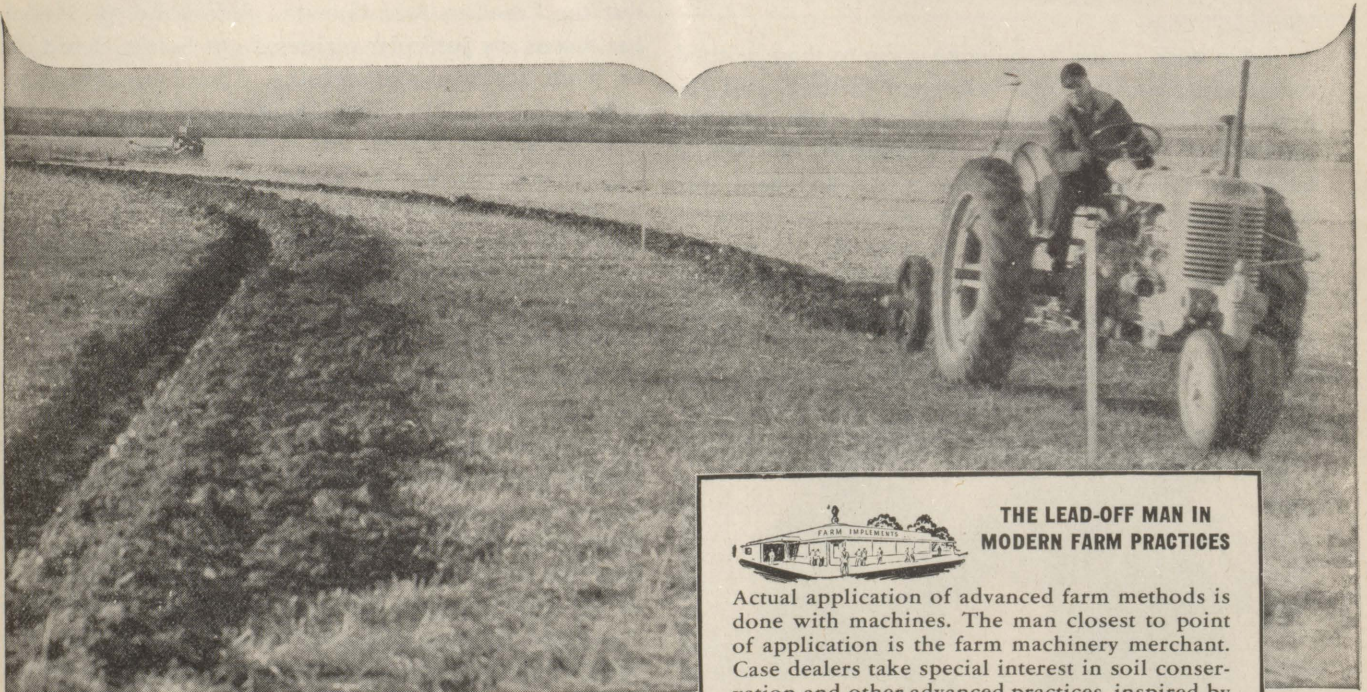
These furrows are the beginning of a broad-base terrace, built by the farmer himself with his own tractor and moldboard plow. The space between is the "island" in the Island System of terrace-building developed by the Soil Conservation Service of the U. S. Dept. of Agriculture. The finished terrace will have slopes so gentle and a shallow channel so wide that modern machinery will work the land as if they were not there.

This slight bulge is a bulwark against erosion. It halts running water, makes it walk slowly, sometimes stand still. Because water can steal

soil only when it runs, the terrace halts the theft of the fundamental farm resource. What's more, terracing increases the rate and stability of returns from that resource. For example, eight-year records on 143 terraced bean fields, totaling nearly 11,000 acres, show average yields 33 percent greater than similar adjacent fields without terraces.

Terracing is one of the many methods of soil conservation and other advanced farm practices to which Case gives active support. Case has produced movies in full color showing why and how to build terraces both with the moldboard plow and the one-way disk plow; also bulletins giving every step in terrace-building with each type of plow. Ask for copies of these bulletins, and how to secure use of films for your own showing. J. I. Case Co., Toronto, Ontario.

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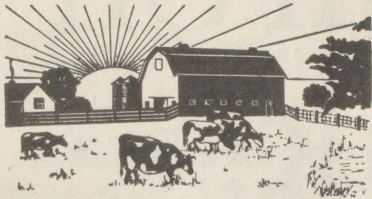


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CASE





AGRICULTURE

Articles on problems of the farm

Growing Swedes in Canada

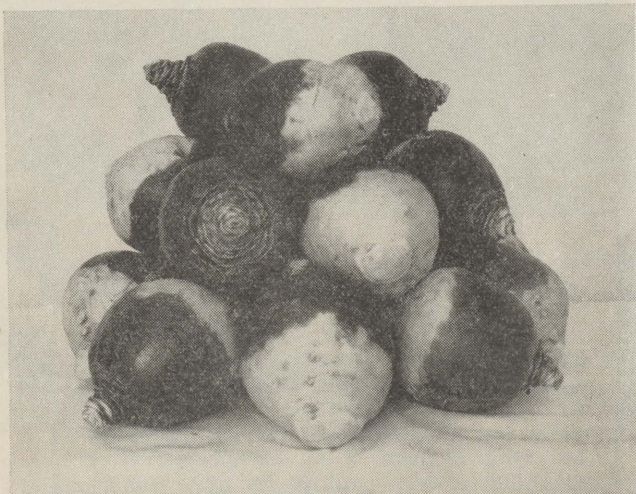
by L. C. Raymond

Good Seed — Careful Growing — Attractive Packaging Make a Successful Table Stock Trade.

An opportunity presented itself last fall (1944) to get a general view of the seed and table stock production of that important vegetable crop — the swede turnip. This crop is almost distinctive to Canada on this continent since conditions in the United States are for the most part too hot and dry for its successful culture.

Since the swede is by origin a Maritime crop it is but natural that reproduction, at any rate, would be most satisfactory under the cool moist conditions characteristic of such a climate. And so we find the chief seed producing centers located in the three Maritime provinces of Prince Edward Island, Nova Scotia, and New Brunswick and in addition in British Columbia where very similar conditions prevail. This far western province enjoys some advantages not possessed by the others on account of its much milder winter season which permits overwintering in the field, of the roots which are grown one year and which produce the seed stalk and seed the following year, in this so-called "bienniel" crop.

Table stock swedes — the name given to those selected for human consumption in distinction to those used for livestock feed — are grown in considerable quantity in the Maritimes. The biggest center of production, however, is located in Ontario in an area lying west and north of Toronto, involving eight to ten counties.



A sample of well-selected, washed Laurentian table stock. The necks would be removed before waxing.

Taken together these two aspects of swede turnip production, while perhaps not big business, at least represent a sizeable undertaking and warrant a few comments. Both seed and table stock phases, particularly the latter, were quite extensive before the war but have grown a great deal, especially seed production, due to restrictions on seed imports.

Swede Production

As a direct result of the war the supply of swede seed, which is normally imported from European countries, was curtailed. To meet this situation a special committee of the Federal Department of Agriculture established a scheme to foster seed production in this country by offering a guaranteed price to the grower as an inducement to undertake swede seed production as a cash crop.

Wisely enough only registered varieties were given this stimulus. Registration means several things. Briefly it means that the Canadian Seed Growers' Association (C.S.G.A.) has chosen any particular registered sort because it had one or more desirable characteristics. These may be higher yield, better quality, disease resistance or the like. Any seed of such a variety that may bear the designation registered is produced under the most exacting conditions to prevent impurities or admixtures of any kind. Finally under the supervision of the inspector the seed is sealed in packages, usually of a one pound size. Registered seed therefore in effect carries a guarantee of genuineness, quality and high germination.

In company with the several inspectors of the Plant Products Division scores of registered swede seed growers in the Maritimes were seen this fall. The inspectors were making their final check on the root crop that was to be stored for planting next spring to produce the seed crop. Inspection involved looking for trueness to type, freedom from disease and any other factor bearing on the perfection of the crop. It seemed that potato and apple growers were the classes of farmers attracted to this comparatively new undertaking. The potato and apple harvest was in full swing. Both were seen in thousands upon thousands of barrelfuls.

Estimated figures of the 1944 seed crop, for the Maritime only, are available, where four varieties of swede



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turnips are grown. The accompanying table shows both the expected seed yield and the varieties involved.

Estimated Seed Production in Lbs. in the Maritimes 1944

	<i>Acadia</i>	<i>Ditmar's Bronze Top</i>	<i>Laurentian</i>	<i>Wilhelmsburger</i>
N.B.	450	.....	20,000	6,000
N.S.	700	8,000	4,000	3,000
P.E.I. ....	.....	.....	20,000	.....

The Laurentian variety, which incidentally originated at Macdonald College, has forged ahead rapidly in recent years, due to its very wide use for table stock production.

While definite figures are not available the indications are at least as much swede seed is being produced in British Columbia, with Laurentian again the prominent variety.

Once the war is over and seed imports are resumed the homegrown product will come in competition with the imported stocks. Since seed, for various reasons, can be grown more cheaply in European countries it can readily undersell the Canadian product. If past experience is any guide however it certainly will not represent the same degree of quality and growers would be advised to stay firmly with the registered grade where the slight difference in price will be far outweighed by the assurance of uniformity and quality.

Table Stock

Late in October — just at the height of the harvesting season — a portion of the Ontario table stock producing district was visited. Parts of the counties of Brant, Waterloo, Perth, Oxford and Wellington were covered. Table stock seemed to be everywhere — trucks, trailers and wagons were transporting them to storage or for processing for immediate shipment. Individual growers raise anywhere from one to five or in rare cases even larger acreages. It is one of the important cash crops of the district and a very safe one since if for any reason the market conditions are not satisfactory they can be retained and used as a live-stock feed.

In the district covered, local growers and shippers estimate that over 99% of the crop represents the Laurentian variety. This sort was chosen due to its bright purple colour, its smoothness, but particularly for its uniformity. In an average season from 85 — 90% of the crop is marketable.

The chief market for this crop is found south of the border in the United States — perhaps enhanced by the presence of so many former Canadians now making their home there who remember the swede turnips mother used to cook. The utmost care in grading is exercised and the

(Continued on page 12)

Soil Erosion and Land Use Problems in the Maritime Provinces

by R. C. Parent

Land use is a problem which faces every country during the early stage of its development. The ability to use land so that it will produce the maximum wealth determines the prosperity of the country. Efficient land use may evolve through centuries of trial and error during which land found to be sub-marginal for agriculture, is put to other uses to which it is better suited. In the Maritime Provinces and particularly in New Brunswick we are still going through this process of trial and error as the uses to which land is put are still changing quite rapidly. Observations indicate that many thousands of acres of land in New Brunswick have been denuded of their natural fertility and now are unprofitable, producing neither a satisfactory farm crop nor a forest crop. Many acres of land chiefly on hillsides now producing unprofitable farm crops might better be growing trees and helping in the control of soil erosion. On the other hand there is some forest land which if cleared would make ideal farm land.

We do not know how much of the forested area of New Brunswick is suitable for farming nor do we know how much of the cleared land should have remained forested, but we do know that from 1911 to 1931 according to the census the area in occupied farms decreased by 400,000 acres while during the same period the crown issued grants covering 300,000 acres. This is an example of the process of trial and error previously mentioned. The clearing of steep hillsides of trees, and forest refuse and the subsequent plowing to prepare them for the growing of cultivated crops has brought about a rapid depletion of the organic matter in the top layers of the soil and has made them a ready prey to the eroding action of water. The damage is so extensive that soil erosion and the

accumulating loss of soil fertility is a problem which is becoming increasingly important to New Brunswick agriculture. It is responsible for decreasing yields on many farms and is one of the contributing reasons for the abandonment of some of them.

While no detailed erosion surveys have been made in New Brunswick, observations would indicate that quite a few areas of the province, particularly in the upper St. John River Valley, are so severely eroded as to hinder the economical production of farm crops. Sampling of the water in the St. John River at flood seasons shows that a tremendous amount of silt is washed down the river annually. Estimates place the amount from one half to one million tons per annum. Not all of this comes from cultivated lands nor does all of it come from New Brunswick territory. Nevertheless the loss of rich top soil from New Brunswick farms is too high.

In the Presque Isle area in Maine where the soil is much the same as in Carleton and Victoria Counties, New Brunswick and where the type of farming is very similar, a detailed survey was made in 1936 and 1937. In an area of 30,000 acres about nineteen per cent showed no apparent erosion (this was largely wooded), eleven per cent showed slight erosion (less than twenty-five per cent of the top soil lost), sixty-one per cent was moderately eroded (twenty-five to seventy-five per cent of the top soil lost), and six per cent was severely eroded (more than seventy-five per cent of the top soil lost).

The topography of the land on both sides of the International Boundary line is very similar and general observations indicate that soil erosion on the New Brunswick side is on a comparative rate to that in Maine.

The province of Prince Edward Island contains one million four hundred acres of land of which approximately one-half is under cultivation and in pasture. In this province which is sometimes called the "Garden of the Gulf" we find many well managed and productive farms. At the same time there are a considerable number of abandoned farms where the fertility has been depleted and where erosion has caused damage. The causes leading up to this condition may be stated as follows: The old Scottish seven-year rotation, commonly called the Prince Edward Island rotation which was quite general throughout P.E.I. for several generations, did much to conserve the sandy loam soils of the province. This rotation consisted of one year of clover and three years of hay or pasture which formed a tough grassy sod which resisted erosion. With the coming of specialized crops such as potatoes and turnips for table stock shorter rotations with much more in-



Water erosion has practically ruined this field; now wind erosion is finishing the job. Photo courtesy U.S.S.C.S.

tensive cultivation were introduced. The shorter rotations greatly increased the erosion, particularly where commercial fertilizers were used extensively and barnyard manure used to a lesser degree. The damage might be much more severe were it not for the fact that the hillsides are fairly short and the fields comparatively small and often surrounded by hedges and dykes.

Soil erosion is not as serious a problem in Nova Scotia as in either New Brunswick or Prince Edward Island, as a much larger percentage of the cultivated land is devoted to hay, clover and orchards which are in sod and therefore resist soil erosion. Out of a total of 590,000 acres of cultivated land in N.S. about 464,000 acres are devoted to hay, clover and orchards. The proportion of the cultivated land in potatoes and turnips is very much smaller than in either P.E.I. or N.B.

Another problem which is almost as serious as soil erosion and which is depriving farmers of the Maritime Provinces of much valuable land is drainage. In the eastern part of New Brunswick and in sections of Nova Scotia, that is, in the area known as the Isthmus of Chegnecto, many thousands of acres of marshlands are deteriorating because of flood waters and it only remains for dykeing and ditching to bring them back to their one-time productive state. Aside from the main marshland areas there are many acres of cultivated land in the Maritime Provinces, particularly in New Brunswick and Nova Scotia that are difficult and often unprofitable to work because small portions of the fields are wet. Here it is generally a question of tile drainage.

The second part of this article will appear next month.

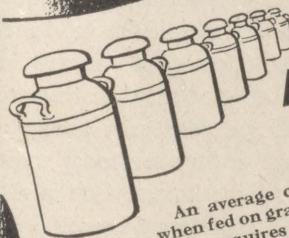


Digging a large outlet ditch that will carry off water from individual farm drains. Photo courtesy of U.S.S.C.S.

Feeders are advised that the 17th edition of the Quebec Feed Board Bulletin called "Feeders Guide and Formulae for Meal Mixtures" is now ready for distribution. Copies may be had on application to any agronomer, the Publicity Division, or to E. W. Crampton, Macdonald College, P.Q.

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Planning The Small Farm Home

by L. G. Heimpele

One cannot go far in a consideration of the present day requirements of farm housing without being convinced that there are thousands of farm homes across Canada badly in need of radical improvement. Most farm folks need not be reminded that it has been practically impossible to do much with this problem since 1930. First, there was the great depression, and before farm finances recovered sufficiently to permit anything to be done to the house the war was upon us. It is therefore likely that the much predicted building boom in farm housing in the immediate post-war period will become a reality.

On a large proportion of the farms requiring attention to the house it will not be necessary to build a new one, but rather it will be a case of remodelling one already in existence. Many old farm houses are not small, but where new houses have to be built they are necessarily going to be small. With construction costs as they are today most farm folks cannot afford to build large houses. One might well ask, however, how large is a small farm house? It is quite obvious that what may be small to one person may be fairly large to another, therefore something in the way of dimensions may help. Perhaps one of the smallest practical sizes of farm home is one about 24 by 30 feet. This size makes a really small house. Yet, it is possible to arrange a kitchen and dining-room at one end and a bedroom and living-room at the other end of the first floor. The second floor of such a house can readily be arranged to provide three bedrooms and a bathroom. Another size of house which has a little more space but yet cannot be called a large house is one in the neighborhood of 28 by 32 feet. This size provides considerably more space than does the former and is in many ways preferable, because of the somewhat larger rooms than can be arranged in this size of building.

There are, however, three dimensions in any house, and the third one is the height. A small house does not look well if it is too high. Also, since the cost of construction depends very largely on the cubic content of the building, the story and a half house is usually preferable to the full 2-story plan. It looks better and it costs less, two very good arguments for the story and a half house.

In the small farm home the object must be to use all available space to the best advantage. This includes the basement, which, in addition to providing a place for the furnace and a cold room for fruit and vegetables, can readily be arranged to provide an entrance room for the men when they come from the barn, where they can hang their work clothes and wash up. Where a basement is to be used for these purposes it is important, of course, to have sufficient head room for comfort, which is not less than 7 feet; also it should be well lighted and have a dry concrete floor. For such an arrangement a grade entrance

is advisable. This door usually is located with the threshold not more than 6 or 8 inches above ground level. From the landing a short stairway takes one up into the kitchen while another short stairway leads to the basement. Such an entrance is also a splendid protection against cold and is a much more desirable entrance to the kitchen than one that opens directly to the outside.

Kitchen Should Be Well Planned

Since the farm housewife spends most of her time in the kitchen this room should have more careful consideration than perhaps any other. There are, however, two definite schools of thought as to which is the better type of farm kitchen — the small kitchenette type of room or the large farm kitchen, of which there are many thousands in use today. The work space part of the kitchen can be concentrated in one end of a rectangular room. Plenty of built-in cupboard space is much more convenient than the old-fashioned pantry. The kitchen sink is perhaps the most important piece of furniture in the room, and it should be placed under a high window, the sill of which is about 4 feet from the floor, so that a high backed sink can be placed under the sill. The top of a kitchen sink should be not less than 36 inches from the kitchen floor. Nothing is more tiring for a housewife than to have to work at a sink in what might be called a half-stooping position. It is important also that the window above the sink face either south or east, as nothing is so cheering as a ray of sunshine through this window on a cold winter's morning.

It saves much work to have the dining table in the kitchen and with careful planning the dining table for the farm family can be placed in one end of the kitchen without interfering with the cook's activities at the other end. One reason why the kitchen is not a popular place for the dining table in some farm homes is the fact that too often the wood stove is still used for summer cooking. One of the greatest blessings in the farm kitchen in summertime is either an electric stove or, failing this, an oil stove to replace the hot wood stove. This summer stove need not be used the year round, because in wintertime the wood stove answers a double purpose, as a source of heat and a cooking fire.

Perhaps, when considering the first floor plan of the small farm home, one should approach the matter of the size of kitchen from another angle, namely, that of the number of rooms that can be worked into the plan. Usually it works like this. If we have a small kitchen, then the dining-room must be dispensed with for sheer lack of space, and if the table has to be set for company one end of the living-room must serve as the dining-room. Another room which is often considered essential in the first floor plan is the master bedroom. Space can usually be found for

such a room on the first floor, and if it is not considered essential as a bedroom then it can be used to very good advantage as a farm office.

The Fireplace and Heating System

One of the things that will add much to the cheeriness of any farm home is a fireplace in the living-room. In many old farm houses existing fireplaces were bricked up when heating by stoves was introduced. Today, however, people want the fireplaces back. When a new house is being built it is wise to keep in mind the possibilities of a fireplace. It must not be forgotten though that the fireplace requires a separate chimney flue. Usually a single chimney with two flues is sufficient, one flue for the furnace and kitchen stove; the other for the fireplace. The best place for any chimney is in the inside of the house where it will be protected against cold, which is responsible for most of the creosote troubles with which so many farm homes are afflicted. Care should be taken that the chimney is safe, and we should note here that no single brick chimney is safe unless it has a glazed tile flue lining. The chimney should rest on its own foundation in the basement and not on a wood support in an upstairs room.

Next to the chimney comes, of course, the heating system. On many farms wood is still the major fuel. If wood is to be burned in a furnace, one that is designed for burning should be used. Good quality wood burning furnaces which permit fairly long sticks to be placed horizontally in the firebox are still available, and these should be used in such cases. Where coal is the major heating fuel in the furnace, one with a round firebox specially designed for coal should be chosen. Short blocks of wood can be burned in these but are likely to be used only in early fall or late spring, when a continuous fire is not necessary to keep the living quarters of the house at a comfortable temperature. Warm air heating, either with a pipeless furnace or with heating pipes running to the various rooms, is still the most economical heating system to install, and when properly installed, will give good satisfaction. Warm air furnaces which will not leak dust and ashes into the warm air stream are on the market and only this type should be used if lasting satisfaction is to be secured.

One cannot discuss heating of a house without thinking of insulation, and the public everywhere is becoming insulation-conscious. The purpose of insulation is to prevent heat from escaping through the walls and roof of a house in wintertime and to prevent heat from the outside getting into the house during the summer months. Insulation therefore works both ways in keeping a house comfortable. As to how much insulation should be installed, let us take the familiar frame house with 2 by 4 studding in the walls, covered on the outside with two layers of lumber and one of building paper, while on the inside we have lath and plaster on the studs. The insulating value of such construction is only about one quarter of that which will be secured if the spaces between the studs are insulated

with 4 inches of good quality, loose filler insulation. In old houses it is often best to add insulation in the form of wood-pulp insulating boards to the inside wall surfaces. These boards can be used as a plaster base or they can be sized and painted to produce a pleasing wall surface without plaster. Possibly the place where insulation will do the most good, however, is on the top floor ceiling of a house. Here one should not be saving with insulation, and a 6 inch layer of any of the loose filler insulating materials is justified. Good insulation will pay for itself in fuel savings within two or three years, to say nothing of the benefits of a house that is warmer in winter and cooler in summer.

Electricity A Great Home-maker

Another thing that a small farm home must have is running water and a bathroom. One can hardly discuss farm water systems without talking about electricity, because the availability of electric power immediately makes possible a simplification of the farm water system. The automatic, electric water system at once makes unnecessary large storage tanks in the attic or in the barn. Nor is it necessary to remember to start and stop the gas engine or the windmill of the old days.

Electricity also makes possible the blessing of electric lighting in the farm home, the electric refrigerator, the vacuum cleaner, the iron, toaster and electric fans. So important is electricity in the home that if a new house is being built it is wise to wire it for electricity, even though the power may not be available at present. The time to do the best kind of wiring job is while the house is being built, and if there is any chance of securing electric power within a few years the investment in wiring during the building process is a good one.

Modern science has brought out much that is new in the way of building materials which will be used in the homes of the future. However, there is no single agency which can do more to revolutionize life on the farm and to relieve more of the routine drudgery around house and barn than can electricity properly harnessed. It has been well said that the ideal life is "country life with city conveniences". With electricity on the farm there is no reason why this ideal should not come true.

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The Importance of The Male Breeder

by W. A. Maw

The male heading a general flock mating is the most important individual in the pen. He must be representative of the breed in type, colour and general breed characteristics; he must be a vigorous breeder; and he must be of especially good breeding for egg production. In other words, he must be the son of a family worthy of heading the future families in a particular flock.

Our general-purpose flocks, which are called upon to produce both eggs and meat on an economical basis, must be headed by only the best possible males.

So much of the future value of the flock depends upon the type of male used that we must place great importance on the quality of all males being used. The tested or adult male is of greater importance, as we should have a record of breeding on which to evaluate the male. Too few adult males are used from year to year. Their value; however, depends to some extent upon the care given such males during the summer and fall seasons. At least one half of the males used each year should be adults.

Body shape is dominant in the male, thus emphasizing further the importance of selecting only the very best males to ensure good body shape and size in the progeny. This matter of body shape is of major importance to ensure cockerels for meat purposes which will qualify as "A" grade, where fullness or plumpness of muscling is a major

factor. Only the full-bodied type of bird can be fattened to advantage for market purposes.

When considering the production of meat stock as broilers, especially where crossbreeding may be followed, body shape is again of first consideration. Since crossbred pullets may also be used as laying stock, the egg production value of such males should also be kept in mind.

Body size for the breed is also very important in maintaining both meat and egg values within the flock. All males used should be of standard weight for the breed. Undersized breeders produce similar smaller bodied progeny. Small sized females usually lay small eggs, and small eggs produce small chicks. It is very easy to reduce the general size of a strain within any breed by losing sight of the value of size in breeding stock, especially in the males.

All breeders should be examined carefully for breed disqualifications, such as side sprigs on the comb, twisted feathers in the wings usually, or in any part of the body, crooked toes, crooked tails, rumplessness or abnormal backs, and crooked keels. Many of these abnormalities or defects are inherited from the parent by the offspring.

The normal, full size bodied bird, having good growth with early feathering, is the most economical type to grow, and it is therefore of utmost importance that due consideration and attention be given to the selection of all male breeding individuals.

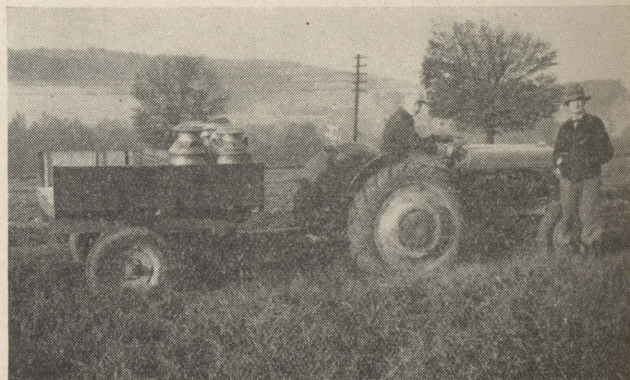
A Home-Made Light Trailer

While in the Eastern Townships this fall I came across a tractor trailer for light work which embodies several ideas well worth while passing on. This trailer was built by Mr. V. R. Beatty, Manager of Wales Home Farm, Richmond, Quebec, and his son Arnold, who is now a student in the Diploma Course at the College.

The running gear of the trailer is the rear axle and wheels of a standard rubber-tired farm wagon. The reach is replaced by the trailer pole fitted with a fork at the front end, which couples to the tractor drawbar with an ordinary pin.

The body of the trailer is carried on two members of 2 by 6 material on edge which fit the bolsters of the wagon, then, the floor of the trailer box is carried on cross-pieces resting on the main bed members. This trailer was designed to take the milk to the station, and the body is made 5 cans wide inside. Since milk-cans are 14 inches in diameter this will give it inside width of about 71 inches. It will be noticed that the body extends well over the wheels, thus mud-guards are not necessary.

The front end of the body is carried on the pole, a cross-piece being bolted under the main frame members and a bolt is run through this cross-piece and the trailer pole. The body is held from bouncing in the bolsters by U-bolts run over the main bed members, the end of the bolts



extending below the wagon bolster, where a plate and nuts complete the job of tying it down.

Another interesting feature of this trailer is the fact that the inside of the body is equipped with cleats, so that the end gate can be placed in any of three sets of cleats, depending upon the number of milk cans being carried. In this way milk cans are prevented from falling over and are kept tightly in place. The sides of the trailer box are about one foot high inside.

We think that the Beatty's are to be complimented on this idea since it is one way of providing a first class trailer without doubling up on the investment in rubber-tired equipment.

— L. G. Heimpel

Commercial Apple Crop in Nova Scotia Reaches 1,750,000 Bbls.

Nova Scotia's 1944 commercial apple crop was estimated to be 1,750,000 barrels by R. J. Leslie, general manager of the Apple Marketing Board in reporting to the annual meeting of the Nova Scotia Fruit Growers' Association. A reasonably good return for the crop was assured the producers. Good progress was reported in marketing. Up to the end of November 852,387 barrels had been sold compared with 750,000 barrels in the corresponding period last year.

Sales in Canada, Newfoundland, Magdalene Islands and United States, classified as domestic fresh fruit sales, approximated 175,000 barrels. A breakdown of these sales showed Nova Scotians to be the greatest consumers of Nova Scotian apples with the province of Quebec coming a close second. Domestic sales included, Nova Scotia 68,120 barrels, New Brunswick, 9,111, Prince Edward Island, 2,736, Quebec, 63,726, Ontario, 477, Newfoundland, 27,086, Magdalene Islands, 941, United States 2,000.

Exports to Great Britain to the end of November totalled 130,091, and deliveries to processing plants, including U.S. export, totalled 548,099 barrels. The balance of the crop, about 900,000 barrels, barring accidents, should be marketed within the first two weeks of March.

Egg Production in Nova Scotia Doubles in 5 Years

Recently compiled statistics show that Nova Scotia's egg production has more than doubled in the past five years. The average yearly production for the 1936-40 five-year period was 5,100,000 dozen. 1944's production has been estimated to be 10,751,000 dozen while the anticipated production for 1945 has been placed at 11,582,000 dozen. The Federal-Provincial programme production for Nova Scotia in 1945 calls for slightly more than twice the Prince Edward Island production and is more than twenty per cent above New Brunswick's estimated production. 1945 estimated production is largely based on the 1944 sale of baby chicks.

The export market for eggs is favourable. The British Ministry of Food has advised that it wishes to take up its option of 600,000 cases of storage eggs for shipment in the Fall of 1945 and has also asked for a shipment of 600,000 cases of fresh eggs in the winter and spring months of 1944-45.

R. P. Gorham, B.S.A. '11, has been elected Fellow of the Canadian Society of Technical Agriculturists. Since 1919 Mr. Gorham has been officer-in-charge of the Dominion Field Crop Investigations at the Fredericton laboratory. He has published many scientific papers and has made valuable contributions to the present knowledge of the biology and spread of aphids in the Maritime Provinces.



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Iron for the Piglets

It may be well to remind feeders that the use of iron for new born pigs will usually pay big dividends. Experiments indicate that ferrous sulphate is as satisfactory as any other form of iron in preventing nutritional anemia and further it appears that there is enough contamination of the iron with copper to make it unnecessary to add copper to increase the utilization of iron by the pig. The administration of the iron is simple. Pick up on a wooden sliver an amount of the powder about equal to two aspirin tablets. Smear this amount across the tongue of the young pig the day he is born. One week later repeat the dose and give a final dose when the pig is two weeks old.

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GROWING SWEDES . . . (Cont'd from page 5)

desires of the market are taken into consideration. Some markets want roots of five to six pounds, other four to five and so on. Shipped in refrigerator cars they cover particularly the eastern half of the United States but are continually enlarging the field. One car was shipped this year to Los Angeles.

In keeping with improved marketing in all agricultural commodities, the preparation and packaging of this table stock is continually being made more attractive. Owing to the long rail trip and still worse the time which they may be exposed on the grocers' shelf, deterioration is likely to result. To overcome this the practice of waxing was introduced a few years ago and an increasing quantity reach the market in this condition each year. Throughout the whole table stock areas there are today eighteen waxing plants where, with a minimum of hand labour, the roots are washed, trimmed, coated with a very thin coat of wax and finally bagged in an attractive fifty pound package ready for loading on the cars and shipment. Compared with the old packaging, where table stock was sold ungraded, with dirt still adhering and the roots and necks not trimmed, the washed and waxed product looks so different that it almost compels purchase when it appears in the provision stores.

The ruling price to the grower during late October was twenty cents per bushel of fifty pounds. This price varies with the season and usually increases considerably either before or after the normal harvesting date. The quantity shipped each year is in the vicinity of two million bushels.

As with most crops some hindrances to production are found. Two diseases have to be dealt with; brown heart or water core and black rot. The former is due to a lack of the element boron—a so-called minor element which can be supplied by borax very cheaply. The latter trouble—black rot—is not so easy. It is both seed and soil borne and while the mercuric dusts such as Cerasan seem helpful, full control measures are not yet established. Leaf eating

insects also take their toll but can be combatted with poison sprays.

This business has developed in this district for a number of reasons. Both soil and climate are well adapted for the crop. The growers are good farmers making a good job of production. Much foresight has been displayed by the shippers and *the quality is maintained.*

Summary

Here then is an illustration of a nice tie-up between the seed grower on the one hand and the producer of table stock on the other; between the plant breeder and the commercial producer of the marketable product. Showing how much good seed of high germination is appreciated, one large shipper of the Ontario district remarked—“within reason, we don't care what the seed costs, so long as you keep the quality up”.

PRODUCTION CONFERENCE . . . (Cont'd from page 2)

and turnips by producers who have recently sold to dehydrators. Production of other fresh vegetables is not expected to change. The desirable potato crop for 1945 is 72 million bushels, slightly less than in 1944. Increases are suggested in tobacco production and with increased quantities of tobacco fertilizer in sight it should be possible to obtain the 22% increase suggested.

Seeds

Alfalfa seed is in great demand and an increased production of 193% (though not likely to be obtained) was suggested. Alsike clover seed is in even shorter supply and an increase of 500% was recommended. It was emphasized that there is a huge export demand for red clover seed and that Canada couldn't produce too much of it. Smaller quantities of sweet clover seed will be needed since the principal market is in the United States, a market which will not develop if their own crop is anywhere near normal. There has been a great increase in production of timothy seed in Canada during the past few years and the recommendation for 1945, 134% of the 1944 crop, was made with a view to providing sufficient seed to meet normal Canadian domestic needs plus a certain amount for anticipated export requirements. With regard to garden vegetable and field root crop seeds, the critical point has been passed and the recommendations are for reductions for a number of kinds.

Minister: “Johnny, which of the parables do you like best?”

Johnny: “The one where somebody loafs and fishes.”

“How did you get that bad eye?”

“It's a birth mark.”

“What do you mean, a birth mark?”

“I got in the wrong one on the train last night.”



Threshing turnip seed in the Maritimes.

Provincial Flax Council Meeting

The semi-annual meeting of the Provincial Flax Council was held in Quebec on December 14th. Questions of seeding, artificial retting and spinning were discussed. The difficulty of obtaining good seed has prompted the Council to set up seed production centres in localities where the land is reasonably free of noxious weeds. Flax is an exacting crop so far as cultural requirements go, and many growers do not pay sufficient attention to proper preparation of the seed bed and subsequent culture of the crop. The Council recommended the appointment of field men who will supervise soil preparation, seeding, and general culture of the crop. Seasonal information will be provided for distribution through the various co-ops.

The committee which is studying artificial retting reported encouraging progress. The Minister of Agriculture announced that the Department would assist in organizing an artificial retting centre where experimental work can be carried out on a large scale.

It was announced that a flax spinning mill will be erected, with the collaboration of the co-operative flax mills and the Department of Trade and Commerce. This project has been under study for over a year, and its realization will help greatly to stabilize Quebec's flax industry after the war.

Charles Gagne was re-elected president of the Council, and E. L. Raynauld, Director of the Flax School, is Secretary.

The British White Paper

The recently issued white paper on the British war effort reveals some interesting statistics on agriculture. The total area of crops and grass was 600,000 acres more in 1939 than in 1944. At the same time, production of food-stuffs increased by 70 per cent in both calory and protein value. How was this possible? By a great reorganization of farming involving reduction of permanent grass, extension of food crops, specially grain and potatoes, and by reducing the number of some of the grain consuming live stock, specially pigs and chickens.

The net result has been that in 1944 Britain had seven million acres less permanent grass land than in 1939, an increase of three-quarters of a million acres in temporary grass and an increase of six million acres in crops. In 1943 the output of both wheat and potatoes was double that of 1939. Production of sugar beets and vegetables was up thirty per cent. Output of meat, poultry and eggs was reduced. Importation of food and animal feeds was almost exactly halved.

Post-War Plans

Present plans are to retain, as far as possible, the gains of the past five years. British farmers have been told that for the next four years they will have assured markets for a wide range of farm products at fixed prices set yearly in

advance. The farm products include, not only grain, but also milk, fat cattle, sheep, lambs and calves. It is also planned to encourage expansion of production of poultry and pigs. The assured market includes potatoes, sugar beets and cereals up to the end of the year 1947.

Two features of this programme are of great importance to Canadian farming. One is the method by which prices are to be regulated and the other is the influence of this procedure on the export surplus of Canadian farm products. From both of these angles it is necessary to keep in touch with developments.

Care of Rope

All of the fibers used in the manufacture of rope are obtained from places outside of Canada. At the present time these sources of supply are able to furnish us with only a limited amount and in some cases none at all. Farmers will be well advised to make their present rope supply last as long as possible by exercising proper care and use. This will leave more of our very limited supply of rope fiber available for the use of the armed services.

If the following practices are observed they will double the life of rope and cut the annual expenditure by one-half on the average farm.

1. Uncoil the rope from the centre of the coil in an anti-clockwise direction. This will prevent kinks from forming. Recoil in a clock-wise direction.
2. When rope is cut ends should be prevented from fraying by whipping, crown splice or knot.
3. Rope dragged over the soil picks up sand and other abrasive particles which acts as a grinding compound to cut the fibers and wear the surface. Keep rope clean.
4. The following rule gives the approximate breaking strength in pounds of new Manilla rope: square the diameter (measured in inches) and multiply this product by 7200. Safe working loads can be found by dividing the breaking strength by six. Hemp rope is three-fourths as strong as Manilla. Tarring the rope decreases the strength by about 25 per cent.
5. Knots, hitches and splices weaken rope appreciably — some as much as 50 per cent.
6. Rope which has become dry and rough may be treated with good lubricating oil, tallow or fish oil. Apply only as much as the fibers will absorb. This excludes moisture and inhibits dry rot and also makes rope more pliable.
7. Keep acids, alkaline solutions, paint and manure away from rope. They destroy the rope fibers.
8. Rope may be cleaned by washing in clear water. Before oiling, stretch it out straight to dry.
9. Store rope in a dry, well-ventilated place.



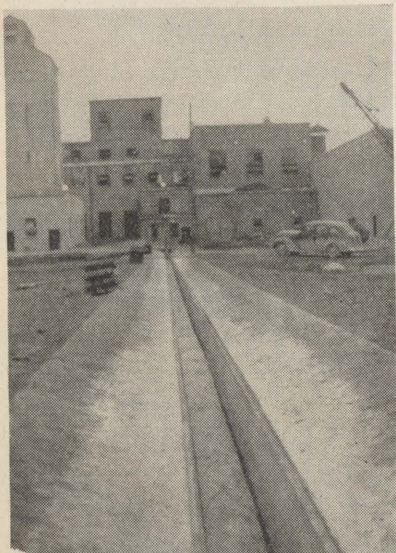
DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

The Quebec Sugar Refinery Begins Operations

The St. Hilaire Plant will manufacture 5,200,000 pounds of sugar, 800 tons of molasses and 1,000 tons of beet pulp this year



This flume floats the beets into the factory

The estimates of field crops for 1944, as given out by the Federal Bureau of Statistics, credits Quebec with 31,000 tons of sugar beets, having an average yield of 6 tons per acre.

It is the smallest crop harvested in almost ten years for Quebec. This industrial crop was introduced in 1934 in the mixed crop system generally used on most farms. During the trial period, the average yield varied from 10 to 12 tons to the acre. In several cases, crops of from 12 to 16 tons to the acre have been obtained from the different sections of the sugar beet zone which takes in 30 counties in the west of the Province on both shores of the St. Lawrence.

Of the 31,000 tons harvested, 20,000 have been shipped to the Quebec Sugar Refinery at St-Hilaire-sur-Richelieu. This plant was built by the Provincial Government and is administered by a Provincial corporation, members of which are: Hon. Laurent Barré, Minister of Agriculture, President; Hon. Onésime Gagnon, Provincial Treasurer; Hon. Paul Beaulieu, Minister of Commerce, Hon. Antonio Elie and Hon. Tancred Labbé, both State Ministers.

The plant started operations at the beginning of November. It will manufacture this year about 5,200,000 pounds of granulated sugar; the by-products, 800 tons of molasses and 1,000 tons of beet pulp will be used for livestock feed.

The plant is situated on a 100-acre property and occupies an area of 132,800 square feet; has warehouses for sugar, beet pulp and farm implements, a lime-kiln and a repair-shop. Apart from the business office, a few staff-houses have been erected close to the refinery to accommodate its personnel.

The St. Hilaire beet plant is strategically situated close to the Richelieu River, whence it procures an ample water supply for the refining process. According to a statement made by R. Allen, general manager of the enterprise, and by his assistant, L. C. Roy, the supply of water required daily is no less than 400 million gallons.

Conveyors carry the beets from the immense mounds where they were piled and they are put through various stages until the syrup becomes crystallized by passing through various drums and giant cylinders. A very recent invention is being employed to separate the pulp from the syrup by centrifugal force and is called the "diffusion battery". The refinery is normally equipped to handle 1,200 tons of sugar beets a day. To operate at this rate would require 400 men. However, in view of the small crop harvested, the operating period will be obviously shortened this season.

According to Mr. Allen, plant officials expected a harvest of 100,000 tons from the 10,000 acres which had been contracted for by the producers. However, poor germination due to an exceedingly dry spring, followed by intermittent rains, delayed the work of cultivation to such an extent that the beet crop was choked up by weeds, as were indeed all garden crops; therefore yields were greatly curtailed. Many farmers, short on forage crops and dissatisfied with the size attained by the beetroots, preferred keeping them for feeding purposes.

When going through the refinery, the Honorable Laurent Barré said the Province would do all that it was humanly

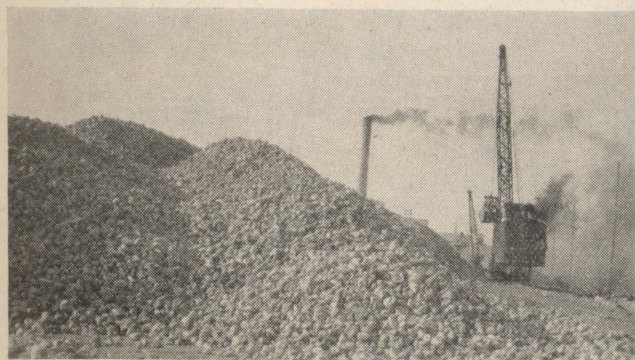


Loading sugar beets for shipment to the refinery.

possible to do to insure the progress of the beet sugar industry as this crop is an important addition to the mixed farm crop system as practised on Quebec farms. Since the plant has been in operation, it has been visited by several organized groups of farmers, each headed by an agronomist. They wished to see for themselves how important this industry really is and to witness the process of transforming beets into sugar.

Despite unfavourable weather conditions and the hasty field preparations entailed, a goodly number of farmers have definitely decided to include sugar beets as one of their mainstay crops.

The sugar-beet industry will, it is expected, develop normally in view of the facilities provided by the government and since farmers are becoming convinced that by growing beets they will improve soil fertility and increase farm revenues.



A huge stock-pile of beets at St. Hilaire.

Quebec's Poultry Industry

Under the stimulus of war-time conditions Quebec's poultry industry made continued progress during 1944. Production of chicks, eggs and poultry meat reached considerably higher levels than in 1943. The 110 private and co-operative hatcheries which reported to the Department during the year hatched 9,589,623 chicks last spring and it estimated that another 500,000 came from hatcheries which did not report. From other provinces 998,275 chicks were imported. In total, therefore, Quebec poultrymen raised more than 11,000,000 chicks in 1944.

Egg production is estimated at 55,483,000 dozens, as compared with 41,418,000 last year. Up to October 31 we had exported overseas 4,603,920 dozens of eggs which is far above the 988,140 dozen exported during the same period last year. An increase in poultry production of 5% is expected from Quebec in 1945 and Quebec poultrymen will continue to do their share in providing the 15 million dozen fresh eggs which Canada has undertaken to ship to Great Britain between September 1 and December 31, 1945.

Our poultry meat production amounts to 38 million pounds, and never before have markets been so plentiful or prices so good. During 1944 poultry meat for export sold at the wholesale ceiling price of 37½ cents for Grade A

milkfed and two cents less for each lower grade. We were not in a position to make the most of the American market, but in 1945, with new killing stations in operation, we may be able to supply a part of this demand.

Federation of Certified Hatcheries Organized

At the recent convention of the Quebec Poultry Industry Committee in Montreal, final plans were drawn up for a federation of all certified hatcheries in Quebec. At the three meetings which were held to discuss the practicability of the project, most of the privately-owned hatcheries were represented and in addition to the hatchery representatives, a number of agronomes and poultry inspectors were present.

The object of the Federation will be to promote, develop and supervise certified hatcheries in Quebec. It will co-operate in every way with the Department of Agriculture to encourage the progress of poultry raising in general and the production of better chicks. It will also act as a central source of information concerning all legislation affecting the operation of hatcheries and the sale of chicks, and will study plans for the post-war period.

The Federation is organized under the law covering co-operative syndicates and a constitution and by-laws have been adopted. The Provincial Board of Directors consists of nine members: six representing the co-operative hatcheries, two representing privately-owned hatcheries and one from the R.O.P. association, which is also a member of the Federation. President of the Federation is Remi Gadbois of Terrebonne; Oscar Ferland, St. Pierre, Isle of Orleans, is the secretary. The head office will be in Quebec.

Sheep Breeding Centre in Charlevoix

A second sheep-breeding centre has been formed in the Charlevoix district with members from La Malbaie, St. Irene and Clermont. The Department loaned 49 pure-bred rams and 412 ewe lambs and 613 ewes were inspected and accepted. Treatment against parasites was given to 1069 sheep before they went into winter quarters. This new centre, located in a district where the hilly country is admirably suited to sheep raising, was organized by agronomes Louis A. Potvin and Leo Lamy.

Freight Assistance on Feed Grain

From October 1, 1941 to March 31, 1944, Quebec farmers received a total of \$10,919,431.26 from the Federal Government through the freight assistance policy for feed grain. This is about one-third of the total payments made by Ottawa under this plan since it was started.

Under the scheme transportation is paid on all grains for feed grown in the west and feed rations derived from western wheat going from Fort William and Port Arthur to points east, and from Calgary or Edmonton to British Columbia. The policy, which has been in force since October, 1941 has been prolonged indefinitely.

Equipment Rationing to Be Continued

Special attention should be drawn to several of the Government Regulations respecting rationing of new equipment.

Under the heading of "eligibility" the government regulations state that a consumer shall not be entitled to buy any new farm machinery and equipment unless he has a free hold or leasehold interest under which he is entitled to actual possession of real property upon which the machinery and equipment will be used.

It also stated that a consumer shall not buy any new equipment unless essential to his operations, and he first completes, and surrenders to a dealer, an application made on a special form. Such application must be approved and a permit issued.

Very clear regulations are also issued as regards the replacement of used machinery. If a farmer disposes of used equipment he cannot make application to buy new

equipment of the same type for use on the same farming project unless prior to the disposal of the equipment he files with the nearest regional office of the Wartime Prices and Trade Board a statement giving a full description of the equipment, reasons for disposing of it, and a full description of the new equipment wanted as replacement. He must also have an authorization from the board stating that in the event of a sale an application for the new equipment will be considered when submitted.

The regulations also stipulate very clearly that the dealer cannot sell equipment to a consumer unless he first receives a permit for the sale from an authorized representative of the Board.

All in all, the regulations regarding the purchase of new equipment and the disposal of used equipment are such that every effort should be made to keep present equipment in the best of condition for use as long as possible.

Notice to Seed Potato Growers

Farmers desirous of having their fields qualified for certified potato seed should use "Foundation" or "Foundation A" seed potatoes only.

The Department has been informed by Bernard Baribeau, Federal Inspector for this district, that there is a sufficient quantity of this category of seed potatoes on hand to satisfy the demand. Requests from the outside, however, are heavy and stocks are quickly being depleted by export shipments.

Growers who intend purchasing this type of seed should order same without delay as there is no guarantee that there will be any left on hand by spring. Those who have seed for sale are naturally taking advantage of the firm market.

Certified seed potatoes and especially "Foundation" and "Foundation A" grades, must be put into new bags. If these are not available, although new bags are more plentiful than formerly, never use bags having contained potatoes or other types of products which might contaminate the tubers. Used bags must be properly disinfected to the satisfaction of the district inspector before being used as seed potato containers.

Clean, used bags have been tolerated because of the jute shortage but new bag material is now more plentiful and there is talk of revoking the amendment permitting the use of old bags in favor of the pre-war ruling demanding the use of new bags exclusively.

This is one of the means adopted to prevent the spread of bacterial ring rot.

The Hon. Antonio Elie was re-elected a director of the Canadian Holstein-Friesian Association recently, and in this capacity he will represent the Quebec breeders. Mr. Elie is also President of the Belgian Horse Breeders' Association of Canada.

Alfalfa Seed Is Lacking

It is estimated that in Eastern Canada there is not enough alfalfa seed to provide the normal planting requirements needed to maintain maximum production of meats, dairy and poultry products, the Agricultural Supplies Board states.

Western Canada has surplus alfalfa seed, but as its normal market is in the U.S.A. the seed is purchased from growers at a price which does not permit payment of the increased freight on shipments to Eastern Canada and distribution there within the retail ceiling price of \$37 per 100 lb., says the Board.

In order to provide for alfalfa seed requirements of Eastern consumers on a basis that is equitable to Western producers, the Board has undertaken to rebate to the buyer the carlot freight rate from Winnipeg to Eastern destination on shipments of alfalfa seed which have been approved by the Seeds Administrator prior to shipment.

Ormstown Fair to Resume

The directors of the Ormstown Exhibition have decided to re-open the fair in June 1945. At a recently held meeting Mr. Gilbert McMillan, Huntingdon, was elected president, H. H. Chambers, Ormstown and D. E. Black, Aubrey, first and second vice-presidents. Directors elected were Douglas Ness, and Alfred Greig. W. G. McGerrigle was again appointed Secretary-Treasurer and Manager.

The Department is revising its list of pigeon breeders. Anyone who raises pigeons commercially is requested to send in to Quebec their name and address and the kind of pigeons they raise. An increased interest is being shown in pigeon-raising and many amateurs are asking where they may obtain good birds. A complete list of all pigeon fanciers will help the Department answer these requests for information.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

The Future is in Our Hands

by Grace A. Kuhring

War, on the battlefields of Europe and Asia is helping to decide the future of Canada. "Nothing matters now but victory", is just as true now as it was when that phrase was used months ago as a slogan for the Victory Loan.

To Canadians, who have, since the earliest days of Confederation, devoted their energies to peace and nation building, the art of war-making is strange. Our men, young and old, are not warriors by instinct nor by preference. When war came, however, many of them gave up the ways of peace and comfort and devoted themselves to learning the use of the modern weapons of war, so mysterious and so strange to them.

Warfare, throughout the centuries, has undergone many changes. From the disorganized moblike assault of the earliest Egyptians, Assyrians and Persians to the co-ordinated combined operations of the land, sea and air forces of today is almost an unbelievable transformation.

This new war . . . total war . . . was something not at all understood. Such unheard of brutality, war on civilians, particularly upon women and children, ruthless destruction of buildings having no military importance, all these were unthinkable and it was hard at first to realize that these 'facts' were not accidents.

World War Two is as different from World War One as World War One had been different from the so-called Modern Wars of the Nineteenth Century.

One of the greatest mistakes made in the preparations for World War Two was the assumption that it would be fought exactly as World War One was fought and that "four years at the outside would see it all safely won" by "our side."

How mistaken were those conclusions is amply proved by the facts.

That a much larger army of fighting men is needed, is also clearly shown now.

It is a military axiom that you cannot win a war simply by not losing it.

Our military experts are leaving nothing undone, in providing the most modern weapons of war for our troops, and the troops overseas have been trained in the use of these weapons to the point of perfection.

There is no surer way for men and for nations to show themselves worthy of liberty than to fight for its preservation against those who would destroy that liberty.

Today those who are left at home have duties which

they must fulfill. The first is to our troops, fighting for us on the battlefields of Europe. We must not let this be called "a political issue" it is rather "a moral obligation". We must find a way to send reinforcements to them at the earliest possible moment.

We sent our troops overseas, "to fight for Canada and Democracy." That is a fine sounding phrase. Do we mean it or is it just a phrase? That question, too, must be decided soon. We are too prone to sit back and let someone else exercise our rights for us.

Let us not think that there is nothing that we can do. We are the people . . . the electors . . . and under democracy only by the vote of the people can a man hold public office.

It is up to us to see that we have leaders, coalition if necessary, whose breadth of vision and integrity of character can be fully relied upon to uphold the ideals of democracy.

Upon us depends the future Government of Canada, the future too of our children and our grandchildren.

We owe it to them to see to it that the land we leave them is in as good condition, or better, than we found it and that Democratic Government with the Four Freedoms of the Atlantic Charter shall be their heritage.

THE PEOPLE'S REVOLUTON

The century on which we are entering — the century which will come of this war — can be and must be the century of the common man. Perhaps it will be America's opportunity to suggest the freedoms and duties by which the common man must live. Everywhere the common man must learn to build his own industries with his own hands in a practical fashion. Everywhere the common man must learn to increase his productivity so that he and his children can eventually pay to the world community all that they have received. No nation will have the God-given right to exploit other nations. Older nations will have the privilege to help younger nations get started on the path of industrialization, but there must be neither military nor economic imperialism. The methods of the nineteenth century will not work in the People's Century which is now about to begin.

We who fight in the people's cause will not stop until that cause is won.

—Henry A. Wallace

Buttonholes and Covered Buttons

by Dorothy A. Morgan

A well made buttonhole will give your dress a well made look. It will also last the lifetime of your dress. There is a lot of wear and tear on a buttonhole and so great care should be taken in making one. No, they are not hard to make but do require patience and practice. You cannot expect to make a perfect one the first time you try, but with a little practice you can learn to make a good buttonhole. To make your first buttonhole, use scraps left over from your dress or blouse or whatever you are making.

There are two kinds to make, the bound or tailored one and the worked one. Both can be very attractive. Before starting a buttonhole you must have your buttons so you will know what size to make. Let us start with the bound buttonhole.

First, you must know what size to make the buttonhole. Using a scrap of material, cut a slit about $\frac{1}{8}$ inch longer than the button. Put the button through to see that there is enough room. If it is a flat button, it should slip through nicely. However, a thick button will require a longer slit. Determine the size of the buttonhole in this way.

Before working on your dress or blouse, make a sample. Cut a scrap of material about 6 inches square. Fold in half and press the fold. This now represents the front of a dress or blouse. It is double so that the underhalf is the facing as practically all bound buttonholes have a

facing. Open up the square and start to make the buttonhole on one half. Usually a buttonhole starts $\frac{1}{2}$ inch in from the fold. Start there and in the centre of the material.

1. Make a line of tiny running stitches the length of the buttonhole. These stitches should follow the crosswise threads of the fabric. (Fig. 1).

2. To make the binding, cut a rectangle of your fabric on the bias, 2 inches wide and $1\frac{1}{2}$ inches longer than the button. Take the bias, fold in half lengthwise and place the fold along the row of running stitches so that an even amount of bias extends from each end of the stitches. Open up the bias, pin and baste in place. (Fig. 2).

3. On the machine, sew a rectangle around the row of stitches, starting at the center of one side, $\frac{1}{2}$ inch from the stitches. Make neat corners and have the same number of stitches at each end. Overlap the stitching about $\frac{1}{2}$ inch. (Fig. 3).

4. Cut through the center of the rectangle to within $\frac{1}{8}$ inch of each end. Here, clip into the corners just to the stitching. Remove the basting. (Fig. 4).

5. Push the bias through the slit to the other side. (Fig. 5).

6. Bring the folded edges of the bias together at the center of the slit, making pleats at each end. Now look at the right side to see if the bound buttonhole is even. If so, then pin and baste the bias in place. Tack the pleats together and press. (Fig. 6).

7. To strengthen the buttonhole, work from the right side and take small running stitches around the buttonhole catching in the bias on the wrong side. This can also be done on the machine. (Fig. 7).

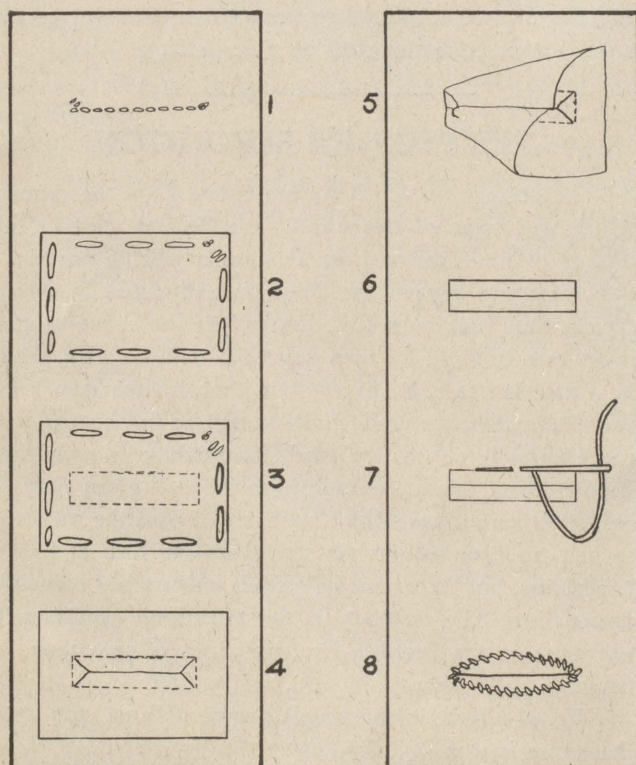
8. You are now ready to make the back of the buttonhole. Fold your sample along the pressed fold. Pin the facing to the buttonhole. Cut a slit in the facing to correspond exactly with the buttonhole. Turn under the raw edges and hem finely by hand. Give the buttonhole a final pressing. (Fig. 8).

If your sample buttonhole is successful you will be able to make buttonholes in your dress or blouse. This is one of the first steps in making a garment. Before assembling your dress, make the front part of the buttonhole. When the dress is put together, then make the back part.

Indicate the position of the buttonhole with tailor tacks or chalk. Then proceed as in the sample buttonhole. When the front parts of the buttonholes are complete, it is a very good idea to hold the lips of the buttonhole together with basting. It helps them keep their shape, especially in a heavy material.

In a worked buttonhole, instead of binding the raw edge, you work the buttonhole stitch over it. This can be done using 2 strands of cotton thread but is much nicer if buttonhole twist is used as it is thicker.

THE BOUND BUTTONHOLE



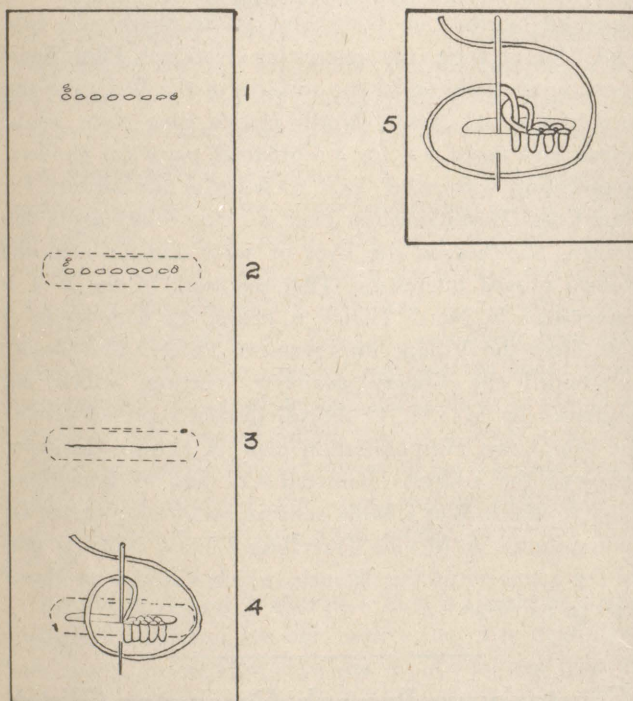
1. Mark the position of the buttonhole with a row of tiny running stitches. In this case you work through the two thicknesses of fabric as the facing should be in place. (Fig. 1).

2. On the machine, stitch around the row of stitches starting at the center of one side and $\frac{1}{8}$ inch away. Make rounded ends and overlap the final stitching about $\frac{1}{2}$ inch. (Fig. 2).

3. Cut through the center of the rectangle to $\frac{1}{8}$ inch from the stitching at each end. Do not snip into the corners. (Fig. 3).

4. Work on the outside from right to left. The stitch used is called the buttonhole stitch. Use the machine stitching as a guide and as you work see that it is just covered by the buttonhole stitch. Insert the needle through the slit and just beyond the machine stitching. Before pulling the needle through, make a loop around it as in diagram 4. Diagram 5 shows the stitch enlarged. Pull the needle through. A small stitch is formed which should always be drawn to the edge of the slit. Repeat this stitch all the way around the slit, trying to keep all stitches even. Occasionally look at the back of the buttonhole to make sure it looks neat.

THE WORKED BUTTONHOLE



Cover Your Own Buttons

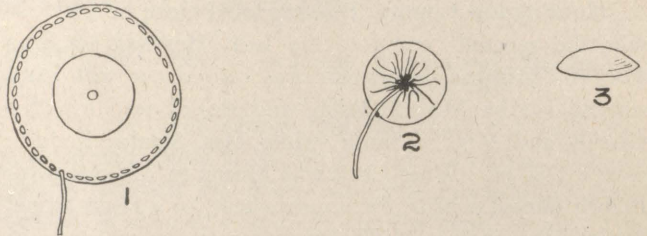
Buttons covered with your dress material are always attractive and so easy to make. You can buy wooden button moulds which cost very little. Or you can use an old button. As the wooden button moulds have a hole in the center, they have to be padded unless you use a heavy material. In silk or cotton the indentation of the hole shows. To pad it, cut 2 or 3 layers of material the same size as the button and place them over the hole.

1. To cover the button, cut a circle of material about twice as wide in diameter as the button. Run small stitches around the edge of the circle. Place the mould in the center of the circle rounded side down. (Fig. 1).

2. Pull up the stitches so the covering is smooth and tight over the mould. Fasten the thread securely. (Fig. 2).

3. Your button is now ready to sew on. (Fig. 3).

Buttons can be covered in many of the large department stores, and the price is very reasonable.



Q.W.I. Notes

Argenteuil County. Frontier Branch had a paper on Publicity by Mrs. A. Graham, and Lachute an interesting talk by Dr. Turcotte on The Aims and Objects of the County Health Unit. A paper on Publicity by Mrs. C. W. Baugh was on the Lakefield Branch programme, and Mille Isles heard a talk on Health and Welfare by Mrs. H. Wood, Morin Heights planned to form a Girl Guide Unit. Mr. Linton Armstrong was the speaker at Pioneer Branch, his subject the Argenteuil Health Unit. Articles on Remembrance Day were read at Upper Lachute. Brownsburg Branch was represented by several members at the Re-make Review shown by the W.P.T.B. This Branch began its Christmas work with parcels sent to needy families. Jerusalem - Bethany sent \$5. to the Salvation Army. A Christmas programme of carols, and a gift-giving gave a holiday air to the meeting. Morin Heights planned a Christmas programme and party, with gifts, to which all the wives of Service-men were invited. Several names were entered on the Blue Hospitalization Plan. An auction sale at the close of the meeting netted \$9.15. Wright Branch sent Christmas parcels to shut-ins. A paper on The Place of a Soldier in Society was given by Lily Thayer.

Bonaventure County. The report from this Branch covers much War work accomplished. Letters from Port Daniel Centre were sent to an English bride and Christmas gifts to an orphan. Port Daniel West entertained the semi-annual County meeting. Addresses by Mrs. Cartwright, W.P.T.B., and by Miss B. G. Fletcher were on the programme.

Chateauguay-Huntingdon Counties. A Christmas programme was carried out in this Branch and carols sung. An exchange of gifts was a feature. A community dinner was served at noon. Dundee Branch discussed Christmas plans, and exchanged gifts. The sum of \$5. was sent to the Girls Friendly Home in Montreal. An excellent paper on Our Associates was read by Mrs. S. Cameron who also conducted a quiz on publicity.

Compton County. Canterbury Branch held social gatherings to augment the treasury, and also held a Xmas celebration with gifts for 44 children. Fruit and foods were sent to ailing ones. Scotstown is conducting a series of educational tests on various subjects, as nutrition, price ceiling, etc.

Gatineau County. The aged and sick were remembered with Christmas cheer by Rupert Branch. The Branch planned a holiday social evening for the community.

Huntingdon County. Huntingdon Branch held a food sale, the proceeds going to the local Hospital, totalling \$18. A Christmas programme was carried out with carol singing led by Mrs. S. Robb, and stories read by Mrs. Cassidy and Mrs. S. Smith, while Mrs. Stanley Roddick gave a talk on "What Christmas Means to Me". Howick Branch offered a prize for improvement, in a High School grade. The singing of Christmas carols, an exchange of recipes, and the sending of congratulations to a member celebrating her golden wedding were features of the meeting.

Megantic County. The retiring President of Inverness Branch, Mrs. McGammon, was presented with a gift of a leather writing case from the members, Mrs. Beattie making the presentation. Lemesurier Branch made plans for a community Christmas tree and sent gifts to shut-ins. Gifts were exchanged and a social evening spent.

Mississquoi County. Dunham Branch had a paper on welfare and health given by Mrs. Farnham. St. Armand supplied funds for a treat for the local school children. A party and sale proved very satisfactory in raising funds.

Papineau County. Papers on the League of Nations and National and International Relations were read in Lochaber Branch meeting. Welfare and health, and Blue Cross Hospitalization were also discussed.

Pontiac County. Bristol Busy Bees received letters of thanks for donations to the local hospital. A food sale and tea netted \$31. for the treasury. An address by Mr. Dean on Remembrance Day was a feature of the day's programme. Ten sick calls were reported, and eight blood donations.

Richmond County. Dennison's Mills provided a wreath for the cenotaph on Memorial Day. The Past President was presented with a membership pin. Prizes were given in the local school. Richmond Hill planned a Christmas tree with an exchange of gifts. A sunshine basket was arranged for a sick child. Spooner Pond catered for the annual banquet of the Provincial Jersey Breeders Association. A sewing contest was carried out at the meeting.

Shefford County. South Roxton had an exchange of Christmas cards as roll call. These were sent to a patient in Warden Hospital. Samples of candy, with recipes, were exchanged.

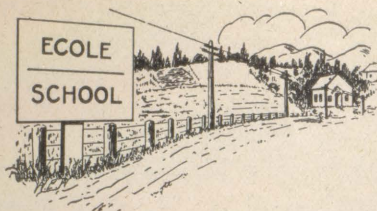
Rouville County. Members of Abbotsford Branch exchanged Christmas gifts, and sang carols. Seven jars of jelly were sent to the Diet Dispensary in Montreal.

Sherbrooke County. Belvidere Branch discussed international relations at the meeting. Brompton held a social gathering which netted a good amount for the treasury. This branch is purchasing additional instruments for the school Rhythm Band, also provided a treat of candy for the school children at Christmas. Cherry River Branch donated \$10. to the local cemetery funds. Christmas treats were provided for all school children. A sale of hand-made articles was held. A bring-and-buy sale was held in Orford Branch which was very successful.

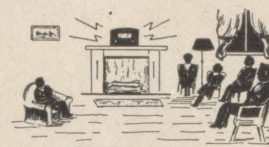
Stanstead County. Norway, its people and customs, was the subject of an interesting meeting at Ayer's Cliff. The medical examination of 106 school children was reported as sponsored by this Branch. Beebe reported 146 jars of jams and jellies donated and equally divided between the Wales Home and the Catholic Home for the aged in Sherbrooke. Prizes for composition work were offered in the Beebe Intermediate School. A check-up in health was recently held in the school. An apron sale was held with good success. All of the report of Dixville's activities was in war services and cannot be included here. Stanstead North sent a sunshine basket to a sick child and flowers to shut-ins. The annual dinner and sale were successfully held. Tomifobia Branch donated \$10. to Stanstead North Soup Fund, and \$5. to Sherbrooke Hospital. An exceptionally interesting National Film Board Showing was held under the auspices of the W.I., also two successful social events. North Hatley gave many school prizes, and voted \$5. for a Christmas party for children, co-operating with other local societies in the matter. The Blue Cross Hospitalization plan is being taken up in this Branch. Sketches on the lives of world-famous men and women proved interesting. That the work of the W.I. is appreciated in North Hatley is proved by a donation of \$50. from the Village Improvement Society. This Branch entertained the County quarterly meeting, which was addressed by Mr. W. O. Nicol, district representative of the Blue Cross Hospitalization plan. A helpful discussion followed the address. Stanstead Co. has an Educational Project, which Way's Mills assisted by offering prizes for compositions. A McGill Travelling Library is being used by the members of this Branch, which has also an Honor Roll to its credit.

Canterbury Branch Operates Clinic

Thirty-four children in the community in which Canterbury Branch operates have been inoculated for whooping-cough and diphtheria in the last few weeks. Thirty-three were inoculated for whooping-cough and eight for diphtheria and whooping-cough. The Branch expended \$40. on the project, the parents paying for the serum, which amounted to \$71. The local doctor did the work at a minimum cost. The W. I. had charge of the Clinic. Canterbury Branch is in Compton County.



LIVING AND LEARNING



Farm Forums Want to Know

Every week brings questions from farm people to the Farm Forum office. If we cannot answer the question ourselves we refer it to an authority. A few of the questions received last month are published below with answers.

1. Hallerton, Huntingdon Co. — *The men are going pretty strong on why there is so much dairy ration and we can get no bran and shorts. It is said that Government has a processing tax of 8% and that is why we can get no bran and shorts; has a set price and has protein percentage of 16 and 17%. Dairy Ration has a price set for a much higher profit and that is why we can get no bran and shorts. Government has a rake off and feed men are all smiles but farmers get madder every time they see dealers with lots of bran and shorts for mixing purposes but none for sale. One of our farmer's brothers was a freight conductor out at Watertown and told his brother that his last freight before coming home had 83 cars of nothing but bran which came down the lakes from Canada for export to the U.S.A.*

2. North River, Argenteuil Co. — *"This being a dairying community, one of our chief problems is — how can we produce milk when feed, at a profitable price, cannot be obtained. It is common knowledge that wheat is stored in sacks in skating rinks and all available space, rats doing much damage. Yet we can't have bran and shorts in quantities or quality sufficient to make milk. Dairy ration is always to be had, milk can be produced at a profit on home mixed rations and at a lower cost. Can anything be done by the government to see that feeds reach us instead of allowing the large milling companies to board all this: to mix into dairy rations, at an excessive profit?"*

Answer to 1 and 2 above. — First it should be stated emphatically that farmers who believe that they must have bran, shorts, or middlings in the rations of any type of farm stock are labouring under a false impression. There is no experimental evidence for such a belief and in fact what experimental evidence there is has shown conclusively that equally satisfactory rations can be prepared without these millfeeds. There are a large group of farmers that are often classed as bran and shorts feeders. Actually these feeders are using for the most part decidedly poor rations largely because of their over-use of these special feeds. Many years ago these mill by-product were thrown away and only on propaganda instigated by the millers them-

selves were wheat by-products popularized for feeding purposes.

It seems quite certain that the continued popularity of bran and shorts at the present time is traceable largely to the fact that the prices for these products is advantageous as compared to those for the cereal grains. This is a war circumstance involving levels at which price ceilings were set. In some cases the price ceilings have given erroneous values to some feeds.

1. Millfeeds produced and exported from Canada are as follows:—

Date	Production	Export
1930-40	656,205 Tons	42%
1940-41	681,083 Tons	44%
1941-42*	675,550 Tons	13.9%
1942-43	788,229 Tons	6.9%
1943-44	737,090 Tons	4.6%
(11 months)		

* Controls put on this year.

Millfeed production in Canada has increased steadily and appreciably. Exports have been cut down to an exceedingly low figure. Canada is duty bound to export some feeds to the West Indies and to Newfoundland and most of the mill by-products exported have gone to these countries. Ontario millers are permitted to export a certain percentage of their millfeeds since their products are not subsidized by the Government and must meet competition with Western subsidized millfeeds.

2. Actually a greater percentage of millfeeds was distributed to country dealers than has been the case in any year since 1938; thus large millers are not keeping as great a portion of millfeeds for their own mixing as was done before the war. Local dealers, however, may be doing more mixing now than previously and hence using their own supplies in this manner rather than for retail sale.

3. The Government, contrary to making any rake-off on feeds, is actually paying freight on all millfeeds and coarse grains from the West to feeders in Eastern Canada. It is not receiving any remuneration from any mixers or any organizations having to do with feeds.

4. The Feeds Administrator states "That 83 carloads of bran went out of Canada at one time is decidedly incorrect."

5. It is illegal for flour mills to demand that a dealer take more flour in comparison to his millfeeds than he did in 1941. If therefore, feeders are being asked to purchase flour in order to get millfeeds it is a local arrangement which can be blamed on the local feed dealers and not in any way on the Government.

The Farm Forum leaders are encouraged to report attitudes like those stated above, some of them have a real foundation and the sooner they are known the better. Others are based on rumour and it is our interest to secure the facts as quickly as possible. In the case of feed it should be realized both the government and feed companies have had to deal with unprecedented demands and shortages. Many of the problems farmers have had to meet have probably been unavoidable.

3. Stark's Corners, Pontiac Co. — *Why is the government urging the farmers to improve more land and grow larger crops when we can't sell on the market our produce at a profit? Why has pork been reduced 20¢ cwt. when a ceiling price was set?*

The fact that ceiling prices have been set for a product is no guarantee that prices will not fluctuate below that ceiling. In the case of pork products, however, there is such a close relationship between prices available for export bacon under our contract and prices available under the domestic ceiling arrangement that there has actually been very little fluctuation during this year. While there may be wider price variations in local areas, depending on trucking and other factors, a study of the weekly average prices for hogs at the Montreal stockyards (basis B1 carcasses dressed weight) shows that there has only been 20¢ per hundred difference in prices in the first eleven months of this year.

Specifically, average weekly prices at Montreal for the above grade of hogs ran steadily, week by week, at \$17.15 from December 1943 (the beginning of the new contract year) to the end of March 1944. This was the period of phenomenally heavy marketings. As marketings dropped off during the spring and summer months, there was a somewhat greater scramble for hogs to keep plants working near capacity during the off season and to supply the domestic market, with a result that prices advanced slightly — and possibly above the levels that could be justified by the export contract price. Thus, weekly average prices for the above grade at Montreal ran \$17.25 during the months of April to July inclusive; \$17.25 for the hog-deficiency months of August and September; while they have been running at \$17.25 from the first of October to the last week for which we have figures (week ending December 7th). It will be seen, therefore, that the slight "drop" in prices this fall was not a real reduction but was rather a settling back from the increase paid during the short period when hogs were not plentiful.

In the C.S.T.A. Review of September 1941, pages 11 and 13, Mr. H. H. Hannam, president of the Canadian Federation of Agriculture, cites the present stability of hog prices as "a very remarkable example of successful price support and price stabilization". Referring to monthly average prices for B1 hogs at Toronto, he pointed out that the spread in 1942 was \$1.44, that of 1943 was 43¢, while in 1944, up to the time he addressed the C.S.T.A. Convention in June, there had been little or no change. At the recent Dominion-Provincial Conference, Mr. Hannam again voiced the appreciation of the farmers of Canada for the stability that had been achieved with regard to hog prices, and in this he seemed to have the general agreement of provincial officials gathered at the Conference.

4. Flanders, Compton Co. — *Our group would like to know if there is a law against lumbermen buying farms and cutting the sugar places. If so, action should be taken at once by some responsible person as a number of sugar places in this district have been cut and more will be cut this winter. Please bring this matter to the notice of the proper authorities.*

This comment raises a very serious question. As far as we know, there is no law against it, though we note that the practice is growing all over the province. The law permits any man to do what he likes with his own property. He can cut down and sell his maple trees, thus destroying a permanent asset for an immediate profit and he can destroy for all time the value of his wood-lot by over-cutting or improper cutting. He can exhaust the fertility of his soil and nothing can be done about it.

A different system is being followed now in Britain. Under the stress and necessities of war, farmers are being classified and if they do not come up to a certain standard of efficiency are actually being put off their farms. Possibly few in Canada would support such drastic measures, but the time may come when a man will not be able to destroy what should be a permanent asset for future generations. We know that the sugar bush and the wood-lot are the only things that have kept thousands of farmers on their farms. Even though the annual revenue may not be high, it represents the difference between success and failure. With this asset gone, the farm, in many cases, is no longer an economic unit.

Many Farm Forums during the past year have pointed out that the high prices being paid for hardwood, and the unsatisfactory and bothersome regulations having to do with the marketing of maple products have influenced farmers. It has been partly through price inducement, partly through exasperation, that many farmers have sold off their wood lots.

Flanders is right. It is an ill-advised practice, and no farmer with the future of agriculture at heart should "ruin his woodlot."

School Radio Popular in New Brunswick

Radio Workshop New Feature — Many Interesting Programmes

A forward step in the development of Canadian youth — education through radio — has hit the Maritimes with force.

Through radio, history is a living thing; geography has taken on form and colour and drama, and music is being taught by experts. The dust is being blown out of education.

One of the men responsible for this awakening is Douglas B. Lusty of the education department of the Canadian Broadcasting Corporation. Mr. Lusty took over the Maritime school broadcasts as they were reaching maturity and instilled into them his own personality and vigour.

In 1928 Nova Scotia's department of education planned and executed Canada's first school broadcast. The idea caught on rapidly. Now every province has its regional school broadcasts in addition to school broadcasts of general interest delivered over a coast to coast CBC network.

An example of the merit of the Maritime broadcasts is the "Junior School Music" programme by Miss Irene McQuillan, director of music in Halifax schools. Miss McQuillan's series was awarded top honours at the Institute for Education by Radio, at Columbus, Ohio, in 1943.

Two other interesting programmes are "On This Historic Site" by Dr. J. S. Martell, assistant activist for Nova Scotia, and "An Airplane View of the Empire" under the direction of Stuart McFarlane, principal of New Albert School in Saint John.

"On This Historic Site" is a dramatic series illustrating

some of the important episodes in Canadian history. "An Airplane View of the Empire" is a group of social studies concerning the growth and scope of the British Empire.

Radio Workshops

In developing education by radio, the education departments of the Maritime Provinces have authorized the establishment of radio workshops. This is a project designed to interest young talent in radio production, writing and announcing.

Following the lead of Radio Station WBEZ, Chicago, a station entirely operated by teachers and pupils, the workshop encourages the practice of "playing radio" in the class room. Fake microphones are set up and a recording is run off as if it were being aired over the network.

One of the most striking things about school broadcasts is the use of imagination, a quality necessary to brighten the school curriculum and gain the interest of youngsters in these days when their lives are full of distracting movement and excitement.

Under the guidance of Dr. Fletcher Peacock, director of educational services for New Brunswick; G. J. Redmond, director of school broadcasting in Nova Scotia, and Lloyd Shaw, superintendent of education for Prince Edward Island, school broadcasts are growing in popularity among children and adults. More than 100 Maritime schools are equipped with radio sets and hundreds of other schools are forced to wait for theirs until the restrictions on radio manufacture are lifted.

Progress in New Brunswick Education Reviewed

New Brunswick's revamped educational system was pointed to with pride by Education Minister Hon. C. H. Blakeny in a National Education Week message to the people of the province delivered at Fredericton.

Referring to the improvements made in New Brunswick educational facilities, Hon. C. H. Blakeny said, one of the most outstanding features was the creation of the Government's one-million-dollar school fund for assistance in modernizing and rebuilding rural schools. Building projects at present being carried out under Rural Schools Assistance Act passed at the last session of the Legislature were placed at approximately \$280,000. Thirteen of the 15 counties, he said, have already come in under the County Unit system and it is expected the remaining two counties will fall in line within the next 12 months. Under this plan financial operation of the schools will be administered by 15 County School Boards, instead of approximately 1,680 separate local district school boards. Under the plan the government makes a contribution of 20

per cent which comes directly from consolidated revenue, he explained.

There is a very marked desire on the part of the people generally, the Minister said, to improve educational conditions in this province so that the children may have advantages equal at least to those prevailing in the other parts of Canada.

Community Schools to Secure Field Secretary

There was unanimous agreement at the annual meeting of the Quebec Council of Community Schools that the services of a field secretary were urgently required to consolidate and promote vigorously the work of these adult schools in Quebec.

Dr. Lois Fahs Timmins reported the results of her field work with the Community Schools this fall, and on the basis of the excellent results of this experiment the Council authorized the Finance Committee headed by E. L. Gilbert of Asbestos to proceed with plans to raise \$3000 to finance the salary and travel for a full time field secretary.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

The Difference

Too few persons, even those who are members of co-operatives, understand fully the difference between co-operative enterprise and the ordinary structure of business organizations. This lack of understanding serves to becloud issues. Co-operative organizations primarily exist to serve their members and not themselves as corporations or institutions. The Manager and Directors of a co-operative organization are in the truest sense merely trustees of the products or services entrusted to them by their members to market or supply. The ordinary business organization operates for the benefit of the stockholders in the sense that it must make a profit to be returned to the stockholders based upon their investment in the business. Co-operative organizations do not buy and sell or handle commodities for the purpose of making profit for the stockholders in proportion to the amount invested in the enterprise, but rather to render a service to those members and partners

in proportion to the volume of business done through their co-operative organization.

As distinguished from other types of businesses a co-operative has at least three characteristics:

1. A co-operative has no profits, it has savings which accumulate to the credit of its members. This surplus can either be retained by the co-operative for use in the business or paid out in cash to the member, all depending on the decision that is made by the members.

2. A co-operative is organized or formed by a group of people who are interested in providing services for themselves for marketing the commodity that they produce.

3. A co-operative itself is operated on a cost basis. Any charges made for the service it renders to its members over and above operating costs accrue to the members. It is money saved by the members in excess of the cost of doing business and is a surplus to be allocated to the members on a patronage basis.

Opposes Tax on Co-operatives

The following extract is from an address to the Ontario Federation of Agriculture by W. J. Parker, president of the Manitoba Wheat Pool as reported in the *Rural Co-operator*.

"Supposing three men owned a binder together and they decided at the beginning of the season that each one would pay in to the secretary one dollar an acre for every acre they cut. They find at the end of the year that the repairs, interest and depreciation on the binder amounted to only 75 cents an acre, so they give themselves back the other 25 cents. Surely no one would argue that by so doing they had created a profit in favor of the binder, and that the government should impose income tax on it. But this is what the Taxpayers Association in Canada proposes. They are not suggesting that the corporation tax itself is unjust or too high.

"There is a fundamental clash of principle and philosophy here, which I suggest to you will not be settled by the income tax commission which has been recently set up, but will finally have to be settled in parliament. The determination of this question will decide whether co-operatives are permitted to develop and grow in post-war Canada. This tax would stymie or retard the development of new co-operatives.

"Our members are paying income tax on their patronage savings. Few of them object. I will support Ilsley or anyone else in collection of income tax from growers on their patronage savings, but we will fight to the last ditch the imposition of income tax on co-operatives themselves."

Name Co-Op. Commission

Appointment of a commission to inquire into the tax position of co-operatives, has been announced by Finance Minister J. L. Ilsley at Ottawa.

Chairman of the co-operative enterprises commission will be Mr. Justice Errol McDougall of Montreal, a justice of the court of King's bench of Quebec province.

Its members will be G. A. Elliott, professor of political economy at the University of Alberta; Jean Marie Nadeau, Quebec lawyer and part-time lecturer in economics at the University of Montreal; B. N. Arnason, deputy-minister of the Saskatchewan department of co-operation and co-operative development, and J. J. Vaughan, of Toronto, former vice-president of the T. Eaton Co., Ltd.

An announcement said the co-operative enterprises commission will inquire into the present position of the co-operatives in the matter of the application to them of the Income War Tax Act and the Excess Profits Tax Act.

It also will investigate the organization and business methods and operations of the co-operatives and comparative position in relation to taxation under the act of persons engaged in any line of business in direct competition with co-operatives.

The commission then will report to the governor-in-council with a view to establishing a "just, fair and equitable" basis for the application of taxation to co-operatives and their competitors.

MARKET COMMENTS

Prices at the end of the year 1944 were very close to those at the end of the previous year. Slight changes may be noted. Good cattle brought a slightly higher price in 1944 than a year earlier. Poorer grades were lower, as were the poorer grades of calves and lambs. Hogs were slightly higher. Dairy products record no change. Eggs and poultry were slightly lower. Both potatoes and apples were slightly lower in price than at the end of the previous year.

The year 1944 was a year of bountiful crops. Report of the farm value of field crops is recently reported. Farm value of field crops was at an all time high in 1944. Above average yields was the major factor in the result. The increase in the value of the wheat crop was slightly greater than the increase in value of all crops. The potato crop was larger in volume and the price lower. The result was that areas specializing in potatoes are not so prosperous as in the previous year. Generally, however, field crops were more valuable, due partly to higher unit prices, but chiefly to better than average yields.

VALUE OF FIELD CROPS IN CANADA

	1932 millions 453	1939 millions 686	1944 millions 1,319
TOTAL			
UNIT PRICES			
	1932	1939	1944
Wheat, per bushel	0.35	0.54	1.05
Oats, per bushel	0.19	0.30	0.52
Barley, per bushel	0.23	0.34	0.66
Hay, per ton	7.13	8.40	12.48
Potatoes, per cwt.	0.63	1.13	1.25

Total value of field crops in 1944 was about double that of 1939, and three times that of 1932. Unit prices of grain run about the same ratio. The result was that in 1944 good crops did not depress prices as the total volume is now, or will be eventually needed.

Trend of Prices

	1943 Dec. \$	1944 Nov. \$	1944 Dec. \$
Steers, good, per cwt.	11.40	11.75	12.08
Cows, good, per cwt.	8.42	8.43	8.45
Cows, Common, per cwt.	6.50	6.25	6.40
Canners and cutters, per cwt.	5.33	4.75	4.90
Veal, good and choice, per cwt.	15.25	13.68	14.36
Veal, common, per cwt.	13.58	9.77	11.18
Lambs, good, per cwt.	12.12	11.97	13.00
Lambs, common, per cwt.	10.12	6.52	6.40
Bacon, Hogs, B1, dressed, per cwt.	17.15	17.25	17.50
ANIMAL PRODUCTS:			
Butter, per lb.	0.35	0.35	0.35
Cheese, per lb.	0.21	0.21	0.21
Eggs, Grade A, large, per doz.	0.48	0.47	0.37
Chickens, live, 5 lb. plus, per lb.	0.28	0.21	0.25
Chickens, dressed, milk fed A, per lb.	0.35	0.32½	0.34
FRUITS AND VEGETABLES:			
Apples, B.C. McIntosh, Extra Fancy, per box	3.30-3.50	.....	3.25-3.50
Potatoes, Quebec No. 1, per 75 lb. bag	1.65	1.10-1.15	1.25-1.50
FEED:			
Bran, per ton	29.00	29.00	29.00

Co-operatives in Canada

Latest issue of the "Economic Annalist", published by the Dominion Department of Agriculture, lists the different types of co-operative enterprises which were in operation in Canada in the fiscal year 1942-43, which is the latest data compiled in this respect. Strangely enough, co-operative telephone services head the list with a total of 2,387; Credit Unions are next with a total of 1,780; dairy industry co-operatives number 446; food products 518; petroleum and auto accessories 500; feed, fertilizer, etc. 625; farmers' mutual insurance co-ops. 400; coal, wood and building material 413; clothing and home furnishings 229; livestock 225; fruits and vegetables 161; grains and seed 105; poultry 194; machinery 125; fisherman 67; hospital care 60; miscellaneous merchandizing 535; miscellaneous marketing 14½; honey 6. The information is given in an article by Alex Turner on the centenary of the co-operative movement.

Recipe for a Happy New Year

Take twelve fine, full-grown Months. See that these are thoroughly free from all old memories of Littleness, Rancor, Hate and Jealousy. Cleanse them completely from every clinging Spite. Pick off all specks of pettiness and littleness — in short, see that these months are freed from all the past. Have them as fresh and clean as when they first came from the great Storehouse of Time.

Cut these Months into 30 or 31 equal parts. This batch will keep for just one year.

Do not attempt to make up the whole batch at one time, but prepare one day at a time, as follows:

Into each day put twelve part of Faith,

Eleven of Patience, Ten of Courage,

Nine of Work (some people omit this ingredient and so spoil the flavor of the rest),

Eight of Hope, Seven of Fidelity,

Six of Sobriety, Five of Kindness,

Four of Rest (leaving this out is like leaving the oil out of the salad—don't do it),

Three of Prayer, Two of Meditation,

And one well-selected Resolution.

Improve the recipe still further by adding a teaspoonful of Good Humor, a dash of Fun, a pinch of Folly.

Pour the whole into a vessel constructed of Love and Devotion.

Cook thoroughly in a fervent heat.

Garnish with a few Smiles, a sprig of Joy.

Then serve with Quietness, Unselfishness and Cheerfulness, and a Happy New Year is assured.

—Author unknown.

Explaining to his civilian friend his role in the artillery, a dusky soldier said: "Ah opens de big gun, puts in a big shell, closes de gun, pulls de trigger, steps back, and says: 'Mister Hitler, recount yo army'!"

STRIPPINGS

by Gordon W. Geddes

Whether it was due to the feeling of goodwill which prevails around Christmas or just that the cats couldn't believe their own eyes, I shall never know. Whatever the reason, I do know that the other night I found a rat eating from the cats' plate out in the barn. The cats were sitting all around and paying no attention. The same spirit didn't affect me for there is a never-ending feud on between the rats and us. So a few seconds later there was one more good rat. I suppose this is pretty late to be talking about the Christmas spirit but somehow it never descends upon me in November when I have to write for the Christmas number.

A while ago we thought there would be an earlier start made on the wood-pile this year. However, we stopped to make a barn-yard for Bonnie's daily dozen this winter and quite a few days slipped by. Still it was a good job done since it also rebuilt the lane fence leading to the barn and also to the calf pasture. The old one was getting in such a state that it was most unreliable. The only trouble is, now that we have a barnyard there are so many animals that could make good use of it that we need several of them. I get more exercise turning them in and out, than the animals do. Still it may do them lots of good for we bought a cow once in the winter which could not get up around calving time. The next winter we turned her out fifteen minutes a day and she had no trouble.

Stanley and I had to tackle the job of weighing hogs again yesterday. It would have waited another week only he will be gone then. Some of them would have been about right then as they weighed up to 190. Lately we have shipped quite a few near the top weight for the grade that still made the A. Of course, they bring quite a bit more money but I don't agree with a neighbour who thinks the grading is foolish because the heavy hogs bring the most money. As soon as they get heavy enough to lose the premium, and get

the cut, it takes a lot of weight to bring more money. And it takes so much more feed to make the weight, that the profit is smaller. And then there is the effect on our future market. The war has made the British appreciate our ability to supply them with bacon but it hasn't made them forget that the Danes sent them the quality they like. We could do likewise and if we don't, some day we'll be frying in our own lard.

It is interesting to note that the Federation of Agriculture has an eye on the future in regard to the wartime nitrate plants. If there is any chance of getting nitrogen cheaper, it should not be allowed to slip away. That element has always been an expensive one to buy yet a much-needed one on many farms. One farmer said that 4-8-10 fertilizer gave him his best grain crop and that certainly means a lack of nitrogen in the soil. In many cases that fertilizer would mean lodged grain. Last year we got a good crop with 2-12-4 but would have liked more potash. The new seedling looked much better where we used a little manure and 0-14-7 fertilizer but we felt inclined to give the credit more to the extra phosphorus and potash than we did to the manure itself. Next year we do not intend to gamble so heavily on alfalfa as we did this time. Even with lime we did not get as good a catch as we did last year without lime but with more variety of seeds. Of course, it was a very dry year but it may be dry again, too.

Some day it may be very dry, for the farmer above us has taken to cutting off the cedar now. Everything else saleable in the woods has been cut so now it is the cedar swamps which guarantee our water supply which are suffering. This emphasizes our belief that the ideal location for the farm woodlot is on the high land of your own farm. Then you can save it but you can't do much when it is the neighbour's woods.

Being secretary of a creamery makes one realize why butter production goes down so much in the winter. We have always milked the cows all winter with some fall calvers so we didn't think so much about it. But now we find the

creamery's production is only half as much for the last part of November as it was the first part of September. How much lower it will go, I can't say but it has dropped 250 lbs. a week for the last four weeks. Maybe we'll have to spread it pretty thin before spring but we are lucky to be able to spread it at all.

Cutting Straw Improves Its Value for Bedding

Providing suitable bedding for cows in dairy stables is becoming an increasingly difficult problem on many farms. Farmers who are short of bedding usually use shavings or resort to buying straw from other farms. Shavings do not react as well in the soil as does straw, from a fertilizer standpoint, but they make good bedding. Buying straw usually results in additional weeds on the farm as baled straw contains plenty of weed seeds.

Where straw is scarce it pays to run it through a silo filler and use it as cut straw, since it goes considerably further than long straw for bedding and the absorption of liquid manure.

Another important reason for cutting straw is the fact that it greatly reduces the labour connected with loading the manure. Also, it is handled more satisfactorily by manure spreaders. All these are, therefore, good reasons for cutting straw to be used for bedding.

Shropshires will breed out of season, as this picture proves. This husky lamb was born on October 21, 1944, and belongs to Slack Bros. of Waterloo. The snap was sent to us by Garrett Chapman and that is Garrett junior holding the sheep.



THE QUESTION BOX

Have you any problems that are bothering you? This column is at your disposal. Address your questions to the Editor, Macdonald College, P.Q.

Q. I am thinking of buying a fertilizer drill seeder. Would it be better to get a machine to spread lime or should I get the grain and fertilizer drill? Could it be used to spread lime too?—R.J.N.

A. Fertilizer is best sown with the grain by the same machine, which is a combination grain and fertilizer drill. However, the capacity of the fertilizer attachment of this kind of drill is not large enough for sowing lime. Fertilizer drills usually handle up to 700 or 800 pounds per acre of fertilizer, but most lime applications should be from half a ton to two tons per acre. It is rather difficult to advise what should be done in your case.

There are available lime sowers, made specially for the application of ground limestone or hydrated lime and these machines hold from $7\frac{1}{2}$ to 10 bushels of limestone. They are broadcasting machines, however, and deliver the material only on the surface. Most of these machines can be used also for sowing fertilizer, though they are probably not adjustable to such small quantities per acre as is possible with combination fertilizer and grain drills.

It is also possible to buy an attachment for a wagon which can be used for spreading lime. This attachment would probably cost less than the lime sower. If you have a manure spreader it might be a good idea to find out from the manufacturer whether or not a lime spreading attachment is available for your machine, for lime sowers are made to fit some makes of manure spreaders.

If you need a new grain drill, we suggest that you invest in a grain and fertilizer drill for fertilizer sowing, and then, to apply the limestone, borrow a lime spreader if you do not want to buy two machines, or try to get an attachment for spreading lime either for an ordinary wagon or for your manure spreader.

The Quebec Department of Agriculture has blueprints for a homemade lime spreading attachment for a farm wagon, which you could obtain by writing them.

Cows Need Plenty of Water

Much has been written in the past about the value of a water system in dairy stables so that cows can have water in front of them at all times. This has been brought out again recently by Donald L. Murray of the North Dakota Agricultural College Extension Service. He says that water aids in the digestion of the feeds eaten and makes up about 87 percent of the milk. To meet these requirements it is believed that a cow needs at least 3 pounds of water for each pound of milk produced.

It should be remembered that the temperature of drinking water for cattle must not be too low. Here is where a water system in the stable, with drinking cups for the cows, plays an important part. When the water stands in the piping and cups it is likely to be at stable temperature most of the time, which is considerably higher than is the temperature of water in a trough or tank, where ice frequently has to be broken before animals can drink. It is obvious that in commercial dairying best results cannot be secured by old-time watering methods.

Raise Healthy Calves

The University of Wisconsin has reported on a method of supplying vitamin supplements to calves which will reduce the present high losses from calfhood diseases. Foundation of the method is the discovery that all calves are born deficient in Vitamin A, and unless this vitamin is supplied "scours" develop. Milk does not always contain enough Vitamin A to afford protection, particularly the late barn-feeding sea-

son from January to April.

Other findings indicate the need of niacin (nicotinic acid) to ward off digestive disturbances associated with scours and that Vitamin C or ascorbic acid helps prevent and overcome both navel infection and calf pneumonia.

The surest way to get results with vitamins is to use them as preventatives before the calves become sick. The investigation also brought out the importance of the colostrum or first milk which contains 10 times as much Vitamin A and twice as much niacin as ordinary milk. It is desirable to have a calf get some colostrum milk within two hours after birth.

They recommend the following programme to prevent or control calf scours:

1. From a feed dealer obtain fish oil with a guaranteed vitamin A potency of 9,000 to 10,000 International units.
2. At a drug store buy some niacin (often called by the older name, nicotinic acid) and a supply of gelatin capsules, size 00.
3. Fill some capsules full of vitamin A oil, using an eye dropper if one is available, and fill the same number one-third full of niacin.
4. Give each calf one capsule of each kind every other day for the first three weeks, placing them on the back of the tongue with the fingers. If the calves show scours, give the treatment once a day instead of every other day.

When Vitamin C is available, a full 00 size gelatin capsule may be given every other day, or every day if symptoms of the diseases appear.

There is no point in feeding Vitamin C after calves are more than 10 days old, since after this time it must be injected in order to do any good.



TO STOP COUGHS
MATHIEU'S
SYRUP
 IS WORTH ITS WEIGHT IN GOLD
 ON SALE EVERYWHERE



THE COLLEGE PAGE

THE MACDONALD CLAN

Notes and news of graduates and former students

Special Courses for Veterans

Regular college courses normally begin about the first of October each year. This raises a problem for those ex-service men who, having been discharged from the armed forces, are eager to begin or resume college studies with the least possible delay. If a man is discharged in December, let us say, must he wait until the following October before he can enter college?

McGill University thinks not. To meet the problem, the University decided to start a new session in January, so that there are actually two sessions underway at the same time. To this special session are admitted only ex-service men who are qualified, academically, to take college work. Beginning in January, the first term of the course will finish in May and then, after a three-week holiday, the second term will begin so that a full year's work will be covered by August. Students who complete this session successfully will then be eligible to enter the regular classes the following October.

Macdonald College already has on the lists as many students as can be accommodated: all the residences are filled to capacity and in addition almost forty students are rooming in Ste. Annes for whom space could not be found in the college residences. Then, too, during the summer months most staff members are so occupied carrying on and supervising field work that it would be quite impossible to carry on classes at the same time. For these reasons Macdonald College does not contemplate having two sessions in progress at the same time.

But this will not work any hardship on ex-service men who intend to take a degree in Agriculture. Any such man discharged after the beginning of the regular session will, if qualified, be admitted to the special session at McGill where he will take a set of courses approved by Macdonald College. These courses will give credit for all but two of the courses normally taught at Macdonald during the first or second year and on successful completion of them the student will be qualified to enter the next higher year here the following October. Students discharged from the armed forces too late to enter the January course will have to wait until October and will come directly to Macdonald, but they will be encouraged to spend the intervening time working at something that

will be of value to them in connection with their course. Those who have not had practical farm experience can get it on a farm approved by the College during this summer.

The only courses normally given in the first two years at Macdonald which cannot be taken at McGill are the courses in agriculture, and special arrangements will be made about these.

Wedding of Interest

W/O James Rexford Bulman, R.C.A.F. and Marjorie Macdonald Brittain, R.C.A.F. (W.D.) were married at Ste. Annes on December 18th.

The bride is the eldest daughter of Dean and Mrs. W. H. Brittain. After graduating from McGill with an Honours B.A. degree she took the course in Education and obtained her High School Teaching Certificate the following year. She taught for a year at McKenzie, British Guiana, then came back to Canada to enlist in the Air Force. Her most recent posting was to the R.C.A.F. station at Pennfield Ridge, N.B. and she returned to duty there when the honeymoon furlough was over.

Jimmy (Bones) Bulman registered for the degree course in the fall of 1940 and immediately presented a problem for the college authorities: he couldn't stretch out his six feet five inches of length in any of the college beds. Jimmy slept most uncomfortably for a few nights until the purchasing department could locate a bed long enough for him.

He completed his year and then enlisted in the Air Force where he trained as a Spitfire pilot. Shortly after arriving in England he was transferred to the Middle East where he was assigned to an Australian squadron in Africa. His next posting was to England where he trained for photographical reconnaissance work; then he went on to India where he joined a ferry unit. Here, however, successive bouts of malaria finally grounded him and he was sent back to England and finally home to Canada.

To the bride and groom we extend the best of wishes for happiness.

Lloyd Hawboldt, B.Sc. (Agr.) '38, was a visitor at the College just before the holidays. He is now Provincial Forest Entomologist for Nova Scotia, with headquarters in Halifax.

THE MACDONALD COLLEGE STUDY OUTLINES

ANIMAL PRODUCTION SERIES: *A study in 5 units—price 30 cents; with supplementary bulletins, 40 cents.* In this series are discussed the general nutritive properties and individual peculiarities of the feeds most commonly used in the feeding of dairy cattle, sheep and swine. Attention is drawn to the nutritional requirements of the different classes of stock and it is pointed out how adequate rations can be prepared to supply these needs.

CROP PRODUCTION SERIES: *A study in 12 units—price 70 cents; with supplementary bulletins, 80 cents.* This deals with matters related to the maintenance of crop productivity at a high level — tillage, rotation, fertilizers and manures, weed control, seed, hay crops, pasture, grain crops, corn, alfalfa and silage making.

POULTRY PRODUCTION SERIES: *A study in 12 units. Price 75 cents; with supplementary bulletins, 85 cents.* This is a general analysis of the place and need of the poultry flock on the general farm; methods of stock selection and general management; poultry products as a cash crop on the farm; special problems of marketing the products.

CO-OPERATION SERIES: *A study in 12 units. Price 75 cents; with supplementary bulletins, \$1.50.* This is a study on the purposes, principles and possibilities of co-operation; the essentials to co-operative success; the function and organization of credit unions, consumers' and producers' co-operatives; problems of management; the place of education in co-operation and a brief treatment of co-operative medicine.

HOME ECONOMICS SERIES: *A study in 6 units. Price 30 cents; with supplementary bulletins, 35 cents.* This series emphasizes the diet as a factor in good health including the place of milk, cereals, grain products, vegetables, the protein foods, etc. It discusses the problem of planning adequate meals at moderate cost, analyzes the food budget and suggests suitable menus.

RURAL LIFE SERIES: *Education, Health, Recreation, in 6 units. Price 80 cents. (But residents of Quebec may obtain free by writing to Director of Protestant Education, Quebec, P.Q.)* Tells about the organization, management

and how to improve our rural schools; how to improve the health services of people in rural areas; why rural people should develop better recreational facilities and how to do so.

ECONOMIC SERIES: *16 printed pamphlets, Price 50 cents for the entire set. Published by the Canadian Association for Adult Education, 198 College Street, Toronto, Ontario.* These cover a number of specific problems of interest to the farmer. The nature of their content is indicated by the list of titles below: 1. Are there too many farmers? 2. Should Canada restrict the farming of sub-marginal land? 3. Will increased production benefit the farmer? 4. Should Canada encourage land settlement of immigrants? 5. Can we improve our taxation system? 6. How far will improved farm management methods help? 7. What does the farmer need in the way of credit? 8. Can the economic position of the farmer be improved through the medium of a government supported policy of research, experimentation and extension work? 9. What can we help to accomplish through Fairs and Exhibitions? 10. Are government grading regulations and marketing services of value to the farmer? 11. What are the conditions necessary for the efficient marketing of farm products? 12. What can the farmer gain through organization? 13. To what extent can co-operative organizations solve the economic problems of the farmer? 14. Is any form of governmental control or regulation over the marketing of farm products necessary, desirable or practicable for Canada? 15. If some form of regulation is adopted, what should it be? What shall we do about it?

To get one or all of these outlines, simply write to the Macdonald College Journal, Macdonald College, Que., and enclose the necessary amount.

A GUIDE TO GROUP DISCUSSION: The technique of group discussion. How to organize a study group. Where to secure study material. How to conduct group meetings, "Neighbour Nights" or associated study club meetings. Suggested reference pamphlets.

Price 10 cents each : 7 cents in lots of 100 or more. A copy is mailed free with each order for the study outlines listed above.



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

FARM POULTRY SALES

Effective December 11, 1944, sales of chickens, turkeys, ducks and geese by farmers direct to consumers became subject to new ceiling prices. The ceiling on turkeys is the wholesale price for the zone in which the farmer lives, plus 20 per cent. For other kinds of poultry the maximum markup permitted for direct sales by primary producer to consumer is 25 per cent of the wholesale price. Markups apply to both live and dressed poultry. On sales to a purveyor of meals, the farmer's selling price must not be more than 10 per cent above the maximum wholesale ceiling price.

POTATO EXPORT PERMITS

Further exports of potatoes may be made from eastern Canada without endangering the domestic supply, a survey of stocks on hand shows. The expiry date of export permits already approved has thus been extended from December 20, 1944, to February 15, 1945. Approval will be given for additional export permits with the same expiry date.

POTATO STORAGE ALLOWANCE

On December 1, 1944, a potato storage allowance of 5c. per 75-lb. sack and 6c. per 100-lb. sack became effective. On January 1, 1945, there was another allowance of 5c. per 75-lb. sack and 7c. per 100-lb. sack, with no further storage allowance until March 1.

RATION BOOKS Nos. 3 AND 4 EXPIRE DECEMBER 31

All coupons in Ration Books 3 and 4 expire on December 31, 1944. These are the 10 "F" coupons for canning sugar; sugar coupons 14 to 45; "D" coupons 1 to 16; and preserves coupons 17 to 32, all inclusive.

BUTTER RATION CHANGES

To adjust consumption to supply during the winter months, changes have been made in the butter rationing system. These changes affect monthly coupon returns of primary producers covering sales or household use of butter. Starting January 1, 1945, butter coupons become good one at a time instead of in pairs and will remain valid until declared invalid.

Valid dates for the first four months of 1945 are as follows:—

Date	Coupon	Date	Coupon
January 4	....	March 1	....
11	92	8	98
18	93	15	99
25	94	22	100
		29	.....
February 1	....	April 5	101
8	95	12	102
15	96	19	103
22	97	26	.....

SLAUGHTERING REGULATIONS

Farmers who slaughter cattle, calves, sheep and lambs for the meat trade still require a permit. Carcasses must be stamped with the letters WPTB and the slaughterer's permit number. Beef, except Red Brand, must also be stamped with a number to indicate quality. Mutton must be stamped with the number 4.

Beef intended for sale must be defatted at the time of slaughter, as ceiling prices are based on defatted meat. Full details may be found in slaughtering circulars No. 5A and No. 7, which may be obtained from any Board office.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board.